



**16-11700 Fw: GAWKER LAWSUIT - Partial response to retort. "It's not a 'Conspiracy Theory' when you have PROOF!"**

**Chantel Barrett** to: nysbml\_caseadmin

12/01/2016 10:58 AM

---

From: XP VEHICLES <legal@xpvehicles.com>  
To: bernstein.chambers@nysb.uscourts.gov, "Galardi, Gregg" <gregg.galardi@ropesgray.com>  
Date: 12/01/2016 10:51 AM  
Subject: GAWKER LAWSUIT - Partial response to retort. "It's not a 'Conspiracy Theory' when you have PROOF!"

---

Gregg-

You folks are throwing around the phrase "Conspiracy" as if it was a bad thing to say out-loud. A number of articles have just come out, globally, about why only fools now use the ploy of defaming Plaintiffs like us by trying to attach negative mnemonic triggers to those who reveal organized crime. The following article that came out today is of interest to all:

[Caitlin Johnstone | Professional](#)

Written 01 Dec 2016

**"How, After This Crazy Year, Is 'Conspiracy Theorist' Still Being Used As An Insult?"**

#Conspiracy #ConspiracyTheory #WikiLeaks #Leak #Email



<http://www.abc.net.au/radionational/image/4749198-3x2-340x227.jpg>

**Since WikiLeaks has clearly revealed that our government is lying to us and the mainstream media is helping them, it's absurd for 'conspiracy theorist' to continue to exist as a dismissive pejorative.**

Debate 0

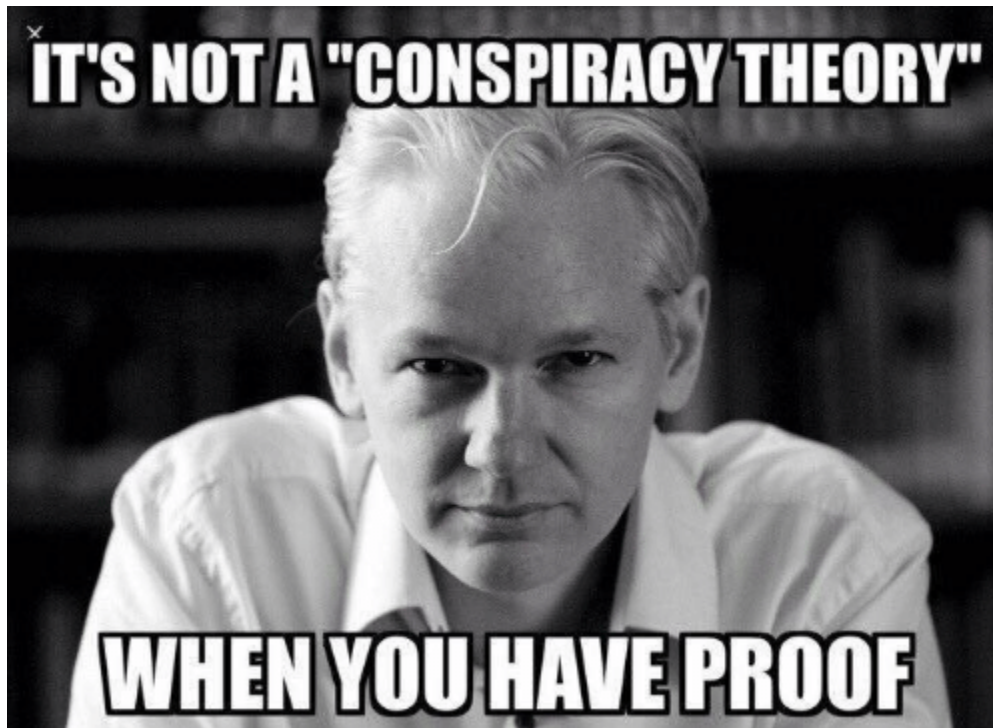
Login and Click Agree/Disagree first to Debate.

I still get called a crazy conspiracy theorist all the time for writing about things like how Hillary Clinton's no-fly zone in Syria [would have probably required a war with Russia](#), or how [Obama's cabinet](#) was largely appointed for him by an executive from Citigroup before he was even elected. These ideas aren't based on wild conjecture or an over-active imagination; there's plenty of solid and reputable evidence behind them for anyone who cares to do their own research (or just click my damn [hyperlinks](#) and view my sources! How hard is it, people? I'm not making this stuff up! I did all the work for you! What do you want me to do, come over to your house and read it to you in different character voices while you drink hot chocolate with marshmallows? What am I, your mom? Not that I'm bitter or anything).

But lack of solid evidence isn't what elicits such accusations and dismissals; the reason such ideas get dismissed as conspiracy theory so often is not due to lack of evidence, but due to lack of coverage by mainstream media franchises. Which should not be the case, because WikiLeaks has [confirmed beyond a shadow of a doubt](#) that the mainstream media actively collaborates with politicians and campaigns to manipulate the public narrative. These people who have "both [a public position and a private position](#)" also have [legions of members of the press](#) in the upper echelons of news media actively colluding with their agendas. But then, that hasn't been covered

much by mainstream media either.

It wasn't that long ago that a conspiracy theory was generally considered to mean an unproven notion widely frowned upon because its adherents tended to have very flimsy standards for proof, and would grasp at any shred of evidence no matter how disreputable as long as it satisfied their confirmation bias. Nowadays, if the conversations I've been having lately are any indication, the term now essentially means "anything I haven't seen on CNN," or even "any new information that causes me to experience cognitive dissonance." It's become another meaningless, vacuous phrase mechanically bleated out by ignorant identity politics dogmatists to support the establishment agenda, much like "support our troops" when the establishment wants to kill people over crude oil, or "obstructionist congress" when the establishment wants people to ignore the way Obama continued and expanded all the worst aspects of the Bush administration, or "don't discuss politics or religion" when the establishment wants us all to turn into a bunch of vapid, drooling idiots.

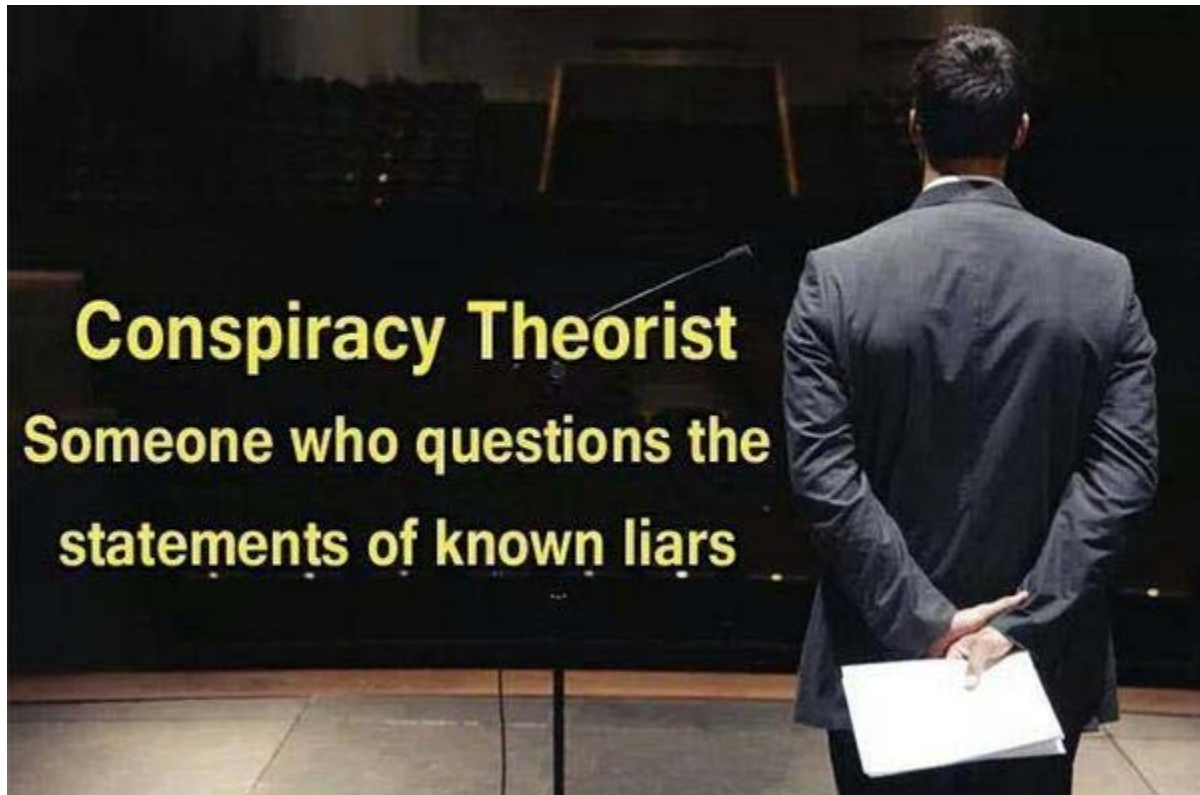


If I've noticed this trend, a lot of my readers probably have, too. But even if the phrase "conspiracy theorist" hadn't been twisted into an arbitrary knee-jerk dismissive pejorative and retained its more traditional usage, it's still silly to see it employed at all.

I mean, think about it. What have we learned this year? The Obama campaign [actively conspired](#) with a Citigroup executive to determine which cabinet members would benefit the people responsible for the Wall Street crash and push the TPP through in great secrecy. The DNC [actively conspired](#) to thwart the campaign of one of their candidates in favor of the other in the contest they themselves were responsible for ensuring remains fair and even-handed. Hillary Clinton's campaign staff [actively conspired](#) to elevate Donald Trump above the other Republican

candidates in order to sink the campaigns of the moderates. Members of the mainstream media [actively conspired](#) with the Clinton campaign to elevate her above her competitors. A Clinton super PAC [actively conspired](#) to use paid shells to deceive people on internet discussion forums into thinking that Clinton had more grassroots support than she did. Democratic party elites [actively conspired](#) to use the media to create a liberal “echo chamber” and control public discourse. I could go on and on and on. These are actual conspiracies that people would have been (and were) mocked and dismissed as conspiracy theorists for suggesting before they were proven, and then they were proven. Every one of them.

Is it reasonable, then, to dismiss anyone who comes up with a plausible theory involving powerful individuals manipulating things in a shady manner? The leaked documents from WikiLeaks only gave us a tiny glimpse behind the curtain of an opaque government and an opaque electoral process, and what we saw there was horrifying. Democracy being actively sabotaged at every turn, plutocrats being given the keys to the nation, and the American people being deliberately and systematically deceived. What else is back there? Is it unreasonable to assume that there are many, many far more horrific things going on behind the veil of government secrecy? I don’t think so. This doesn’t mean we should accept any conspiracy theory as gospel truth; these ideas ought to be vigorously debated, and we should of course always bring critical thinking to the table. But in light of this year’s revelations, critical thinking necessarily means being wide open to the possibility that things are not at all happening the way we’re being told.



It’s very naive to think that large institutions are immune to criminality, and that it’s not possible for networks of people in power to use that power for ill. Are we really meant to ignore that



obvious reality whenever it appears to be manifesting in our own institutions? I'd say that would be pretty stupid.

Lately whenever someone accuses me of spreading a conspiracy theory I've been mentally replacing the word "conspiracy" with one of its synonyms, which makes them sound a lot sillier. You should try it. "God, spare me the collaboration theory" doesn't have that instant debunking quality that they're reaching for. It means the same thing, and there is definitely collaboration happening, but now it's got the baseless stigma removed.

You can use other words like a "collusion" theory. A "co-operation" theory. "Pfft," you hear them say. "That's just an organized crime theory."

Yeah. Yeah it is. Click my damn hyperlinks"

=====

XP staff are unable to attend the Dec. 1 Southern District NY Bankruptcy Court hearing because XP has received no reply from any participant in the matter about case coverage of travel expenses. This email shall serve as XP's participation in the Dec. 1, 2016 hearing -

Recent leaks and disclosures have now confirmed the following:

1. Gawker Media was controlled by White House staff, DNC bosses and White House Silicon Valley campaign financiers named in the supplied evidence and at <http://communityone.info> and in FBI files. Gawker Media was participatory in a designed and coordinated conspiracy to defraud the U.S. Treasury and American taxpayers. Gawker Media engaged in RICO violation organized crime. Gawker Media was not simply "...a crappy tabloid run by millennial deviants..." . Gawker Media is a tactical political weapon operated by famous public officials in a deviant manner.

2. Gawker Media was the "hit-job ", hatchet-man, retribution, vendetta service for the parties in the Cartel that Gawker operated as part of. Over 1000 experts including public officials, famous journalists and other credible voices have now publicly stated this in published media.

3. Gawker Media coordinated media attacks against targets with its partners at Twitter, Facebook, and, most particularly Google. It is ludicrous for any educated person to mock the revelation of a "conspiracy" when the news is rife with over 100 fully proven conspiracies that were uncovered in the last 3 years. Opposition counsel is using a Nixon-Era Halderman-like play-book trick of "mocking Conspiracies to seek to damage credibility..." This is the root of political corruption in Washington DC: Feigned Denial!

4. The recent Wikileaks documents and materials supplied by FBI, GAO, Congress and other knowledgeable experts prove, beyond any doubt that a mining commodities (lithium, uranium,

indium, copper, rare earth metals, etc.) conspiracy and an election process conspiracy using the rigging of web and news data was indeed in place. (A tiny sample of which is attached) Tesla and Google's car projects exploit the lithium mining scams.

5. XP staff report to the FBI on a regular basis. XP staff have cooperated with the FBI for a number of years. XP staff make personal deliveries, and 24/7 online provision, of accumulated evidence data to the San Francisco (and DC) FBI office on the 13th Floor of the main McAllister Street office in San Francisco. XP staff have assisted in the federal investigations of this case.

6. Gawker Media was hired to author multiple attack articles and videos against XP and its staff. Gawker Media worked with Google to lock those attack productions on the top lines of all Google and YouTube products for over half a decade. XP worked with a 1000 server sting and metric analysis system to prove that Gawker and Google were rigging the internet and proved it. Gawker Media created fake blogger comments to further damage XP. Gawker Media sent the attack movies and articles to every employer, investor, supplier, public official and business associate of XP and XP staff and investors in order to damage XP and create financial catastrophes. Gawker was the operator of a scheme to punish XP for helping law enforcement and to stop XP's superior competing products from reaching the market and affecting Gawker's handlers and hit-job requesting clients.

7. XP has asked the incoming U.S. Attorney General, Mr. Jeff Sessions, to appoint a federal **"Special Prosecutor"** to over-see this case in light of the ongoing, and deeply documented cover-ups by the Obama Administration, publicly confirmed on record by the United States Congress. Over 2000 witnesses are prepared to testify.

8. XP was asked to participate in the Cartel efforts and refused the gestures because XP feels that "A CRIME IS A CRIME" and that the participants in the above mentioned RICO violations belong in federal prison. XP has a long-standing, multi-Administraton relationship with the White House as proven by White House letters and senior official videos and photographs. XP is strongly opposed to political corruption!

9. XP demands that every attack video, Gawker created fake comment and hatchet job article created by Gawker attacking XP, it's staff and investors be wiped from it servers and those server sections be defragmented with Bleachbit Defrag and 4X overwrite and never replicated. XP is aware that many Gawker hard drives have a hidden pre-start section that can hold data not visible to ordinary file readers. Those hidden sections are discussed in the website: **Krebs on Security** . Those hidden sections must be destroyed as well.

10. XP demands complete restitution for it's damages based on legal industry comparative metric values for the cost of the damages caused by Gawker to the business, brands, lives and futures of XP and it's staff and investors.

11. XP demands a printed public apology and retraction to be posted on all Gawker Media and Google assets.

(note: There are 40 files attached as links, if your 40 files did not come through, check

<http://communityone.info> )

I've linked 1 file to this email:



[An Investigation Of Solyndra And The Department Of Energy Disasters 1.5.pdf](#) (16.0 MB) 

[Hightail](https://www.hightail.com/download/cUJYTmZWUnJreEJEZU1UQw) <https://www.hightail.com/download/cUJYTmZWUnJreEJEZU1UQw>

[Mozilla Thunderbird](#) makes it easy to share large files over email.



Dear Gregg1.pdf GAWKER BANKRUPTCY HEARING SOUTHERN DISTRICT NEW YORK - AMENDED.pdf



AAFINAL-DOE-Loan-Guarantees-Report.pdf



THE AFGHAN SPY PAPERS ON AFGHANISTAN ELECTRIC CAR LITHIUM.pdf

Nov. 29, 2016

XP Vehicles Group  
Trustee Office  
legal@xpvehicles.com

Gregg Galardi – Attorney For Gawker Media  
Ropes & Grey  
1211 Avenue of the Americas  
New York, NY 10036-8704  
[gregg.galardi@ropesgray.com](mailto:gregg.galardi@ropesgray.com)

Dear Gregg:

Thank you for your letter dated November 22, 2016 which was received today Nov. 29, 2016.

As we have asked Prime Clerk staff, please email any time-sensitive material to us as well as FEDEXing materials. As most of your materials have been received within a day or two of a critical court deadline, it makes it appear that someone is trying to cut off our opportunity to have fair use of the justice system, by removing every opportunity for us to use the justice system. If you send us communications in a manner contrived to give us no time to research the materials and draft a response, it could invalidate your entire bankruptcy case and lead to a re-do of the entire case in 2017.

We are not lawyers and we are unable to expend the hundreds of thousands of dollars quoted by law firms to represent us in this case. Our cash is temporarily limited because of the financial retribution attacks on us by Gawker Media and their handlers. Gawker did this, in part, to damage us financially in hopes of reducing our resources. I guess the joke is on them now. Therefore, you must re-write your letter to us using normal language and without all of the trick double and triple-meaning secret legal phrases that only a high-end corporate lawyer, such as yourself, could possibly comprehend the legal implications of.

We are trying to get Peter Thiel to pay for our prosecution of your parties in this case, but we have not reached him yet. If any of the other creditors want to pay for our lawyers in this matter, we will give them a percentage of our winnings. We are copying this letter to every creditor so maybe one of them might let us know if they want to sponsor a law firm for us.

Gregg, we are mostly aligned with the “Independent” political affiliation. In other words, we don’t care which politicians go to prison for corruption, from any party. Having said that, it is hard to not notice that a man just won the Presidency of the United States simply because he engaged in “*Plain Speaking*”. Since most of America just made global history by putting the Trump Administration into power, I think we should respect the edict that the voters put forth calling for more plain speaking.

As technologists, we wanted to author this letter with that kind of **plain spoken English**. We want to, for clarity, confirm the meanings of some terms that we may tend to use. When you write us your normal language letter, please define any legal terms that you use. Here is such an example from a term we will use:

The first technology term we want to define is: “**Bullshit!**”



This term refers to the use of items in a communication which are known by most of the world to be false. For example, you plead that Gawker Media only has a few million dollars left, yet our CIA, FBI and major media colleagues say that there are over a billion dollars in assets. Are you lying? Are your investigators lying in order to scam the creditors? Are your investigators incompetent? Thus, we say that your pleading of poverty on behalf of Gawker Media is absolute and total “**BULLSHIT!**” (A technical term). We and EVERY creditor should be able to get each of our full financial demands. We sent you a general list of over \$1B in asset areas. What say you to that list? We don’t see a single document in the court records where you fully value the brand value, the IP value, the DNS route values, the Google Cartel internet search rigging value, the Eastern Bloc bank accounts, the tax evasion trusts and other novel goods.

The next terms is not so much a technology term as, well, just a big term that we want to be precise about.

The term is: “**Treason**”.

It is defined by Merriam-Webster as:

## **Definition of *treason***

- 1 : the betrayal of a trust : [treachery](#)
- 2 : the offense of attempting by overt acts to overthrow the government of the state to which the offender owes allegiance or to kill or personally injure the sovereign or the sovereign's family

In fact, those federal and media investigators, along with everybody from Wikileaks, to Senators, to ex-Gawker staff, have now provided evidence that proves that Gawker Media, working with Google, engaged in the legal definition of “Treason” by illegally manipulating the Obama election and attempting to manipulate the Hillary Clinton election. The news and internet rigging is now covered in over a million news stories. It is laughable to deny it now. You have have heard of Jofi Joseph, the White House staffer in the West Wing who Tweeted the daily dysfunction of the Obama White House. Did you know there have been hundreds of White House staffers, like Jofi Joseph, doing the same sort of thing? The toothpaste is out of the tube. The evidence against Gawker Media and Gawker’s handler/clients is overwhelming.

Before we did vehicle and energy innovation we did law enforcement and intelligence innovation. Rest assured that the new Attorney General and the soon-to-be upgraded FBI are chomping at the bit to crush the nuts of the Gawker Cartel. We will help them do that if you don’t settle up with us. In fact, we have bcc’d this email to Jeff Sessions, Trey Gowdy and pretty much everyone in the new Administration, news media and law enforcement that Gawker would never want this seen by. We love epic transparency. Please know that every three-letter agency you have ever heard of now has a copy of this letter. They have all seen the evidence samples at <http://communityone.info> and the many other peer-to-peer law enforcement sites. They each have vast additional files on this matter.

Via this letter, we offer the services of “CODE RED”, our law enforcement affiliate, to each and every Gawker Creditor. CODE RED, working with high level resources, will hunt down every ACTUAL

Gawker/Denton/Cartel asset. CODE RED is like **Stratfor** on steroids. CODE RED will charge \$310K for the work, which, interestingly, is the same amount that XP needs for legal costs for this case.

We hereby demand again, that the Department of Justice appoint a “Special Prosecutor” to oversee this organized crime matter. We will continue that demand under the Trump Administration in 2017.

We hereby demand again, that the court appoint equitable legal counsel to our firm.

Thanks for the offer of the \$25K. That will pay for a couple days of lawyers in this case. Come back when you have a real number. The thousands of people in our core team and the hundreds of millions of voters will continue to hunt down (WITHOUT BREAKING A SINGLE LAW AND WITH THE HELP OF LAW ENFORCEMENT) every Gawker employee, investor, handler, and associate that tried to “kill us”, and that did kill our colleagues and peers (Conley, Motwani, Rich, Kumar, Slym, Bird, etc.).

Adrian Covert, Nick Denton, John Herrman, John Cook, Eric Schmidt and Larry Page need to know that hell will freeze over (plain speaking colloquialism) before we end our investigations of every hooker, rent boy, secret trust fund, stock scam, credit card transaction, paypal transaction, tax evasion, Russian covert accounts, bitcoin transaction, Uber account, and everything the Gawker people ever plugged in, turned on, spoke into or typed on. We will never stop until we get restitution for the malicious attacks on us. Guess what?; NSA, GCHQ and FBI records now CAN BE Subpoenaed!

We look forward to having our day in court with equitable representation, and to taking the stand against Gawker Media on behalf of ourselves and America. We already know what the NSA, CIA, DIA, FBI, OSC, GAO, Senate, and all the others already have on file, and it will “cook Gawker’s geese” (plain speaking colloquialism). Settle this now and pay our damages or EVERYONE will pay the price. We can take every suspect down without breaking a single law because they did CRIMES! We have pre-pledged our future assets to private eyes that will get this done, even if none of us are around to see that day.

Your settlement offer is based on falsified asset values. First go find the real assets or hire us to find them or just call James Comey at the FBI, who we report to, and ask him! Your asset numbers are fake until you get closer to finding \$1B in Gawker Assets!

Don’t BULLSHIT US! Pay your dues!

Thank you.

XP Group

BCC: Agencies, Media, Creditors, Congress





ROPES & GRAY LLP  
1211 AVENUE OF THE AMERICAS  
NEW YORK, NY 10036-8704  
WWW.ROPESGRAY.COM

November 22, 2016

Gregg Galardi  
T 212 596-9139  
gregg.galardi@ropesgray.com

XP Vehicles Group  
c/o Scott Redmond  
601 Van Ness Avenue  
San Francisco, California 94102

Re: *In re Gawker Media LLC* (Case No. 16-11700 (SMB), Bankr. S.D.N.Y.)

Dear Mr. Redmond:

As you know, my firm is bankruptcy counsel to Gawker Media LLC, Gawker Media Group Inc. and Gawker Hungary Kft. (f/k/a Kinja Kft.), all as debtors and debtors in possession (the "Debtors"), in chapter 11 cases pending in the United States Bankruptcy Court for the Southern District of New York (the "Bankruptcy Court"), No. 16-11700-SMB (the "Bankruptcy Cases"). I am writing to you regarding the proofs of claim that "XP Vehicles Group" has filed against the Debtors (the "Claims"), our Objections to those Claims (Docket Nos. 393, the "Claims Objection"), and the Claims Estimation and Plan Reserve Procedures (as defined below). Because the hearings on December 1 and December 13 in the Bankruptcy Court are rapidly approaching and will significantly impact your recovery on the Claims, I wanted to set forth how the Debtors intend to proceed regarding the Claims at those upcoming hearings and begin a dialogue regarding efficiently resolving the Allowed amount of the Claims and the potential distribution on such Claims.

As you probably know, the Debtors are presently soliciting votes on a proposed chapter 11 plan (the "Plan"). That Plan, we believe, maximizes the funds available for all stakeholders, and includes highly beneficial settlements that the Debtors have reached with a number of creditors and the official creditors committee, and calls for speedy resolution of many other claims, including the Claims (the "Plan Settlements").

Accordingly, the Debtors believe it is in the best interests of their stakeholders to proceed on the Claims Objection in the Bankruptcy Court at the December 1 hearing. We also wish to make clear that if the Bankruptcy Court does not disallow the Claims based on the current Objection at the December 1 hearing, the Debtors presently intend to seek estimation of the Claims at the December 13 hearing. In that regard, on November 14<sup>th</sup>, the Debtors filed and served on you a motion seeking approval of procedures for estimating claims in connection with the setting of reserves established by the Plan (the "Claims Estimation and Plan Reserve Procedures"). The hearing to approve procedures is also scheduled for December 1, 2016, and objections are due November 28, 2016. If approved, those procedures would apply to the Claims and under the

ROPES & GRAY LLP

- 2 -

November 22, 2016

proposed Claims Estimation and Plan Reserve Procedures, the Debtors intend to seek to estimate the Claims at a hearing commencing on December 13, 2016, in connection with the confirmation hearing.

Notwithstanding the above and the Debtors' position that the Claims should be disallowed, it would benefit all parties, including XP Vehicles as an alleged creditor, to avoid the costs of litigation, especially given the limited recoveries that it would likely receive under the Plan, if that Plan is confirmed. Under the Plan, and as a result of the Plan Settlements, unsecured creditors (with allowed claims) of Gawker Media are to receive their share of the Gawker Media Claims Reserve of about \$3.75 million in cash and, if that were not adequate to pay unsecured claims in full, additional cash that would bring the total amount to \$6.5 million. So, if you believe the distribution on the Claims is in excess of this amount, XP Vehicles likely would need to not only litigate the merits of the underlying Claims but also Plan confirmation and the Plan Settlements. We point this out to draw your attention to the issues to be litigated and the potential costs, and so we are not "talking past each other" in any negotiations regarding the Claims and procedures. The Debtors believe that as a result of the Plan Settlements and most particularly the settlement on the allocation of Sale Proceeds, recoveries could be limited regardless of whether XP Vehicles ultimately prevails on the merits of the Claims.

Thus, we think it mutually beneficial for the parties to agree about procedures for resolving the Claims or setting a reserve. So, to proceed expeditiously and cost effectively, either (i) you should provide a realistic proposed reserve, or (ii) we could attempt to settle the Claims. As to settlement, the Plan includes a settlement offer for the Claims, via the so-called Convenience Class. You are entitled to opt-in to the Convenience Class, and receive a single payment of \$25,000 (which we would anticipate making before year-end).

If that amount is not acceptable, you should provide us with a settlement offer. That offer should be realistic. While we can give no assurances as to whether a particular offer will be acceptable, we will consider the settlement offer and if appropriate enter into good faith negotiations regarding a settlement of the Claims.

Should you have any questions regarding this matter or like to discuss the matter, please do not hesitate to contact me or my partner Ross Martin.

Sincerely,



Gregg M. Galardi





**COURT STATEMENT TO BE READ IN COURT AT DEC. 1, 2016 HEARING- GAWKER  
BANKRUPTCY HEARING SOUTHERN DISTRICT NEW YORK – AMENDED**

**In re: Gawker Media LLC, et al. Case No. 16-11700 (SMB)**

Gawker Media was hired to sabotage the multi-billion dollar profit pool for a global vehicle manufacturer, an international award-winning energy company and others, who competed with Gawker's "handlers". Our team was awarded White House and Congressional commendations and funding to "*help create American jobs and energy independence*", but that conflicted with the schemes and scams of Gawker and its corrupt "handlers".

These "handlers" paid Gawker in cash, stock, search engine rigging, troll/botnet and meat puppet mills, intellectual property, internet routing, revolving door jobs, advertising accounts and other items of value. The unjust rewards asset values of the overall interests of items transferred to and from Gawker exceed \$1 billion and those funds were transferred between states, making this an FBI and Congressional investigation jurisdiction matter.

The "handlers" were Gawker's clients who illicitly retained Gawker to produce multiple hit job videos and hatchet job articles in order to damage others. These same Gawker clients took the funds away from those who were attacked, including us, put those funds in their own bank accounts, and made billions of additional dollars from those scams by exploiting their competing efforts.

The many irrefutable evidence items of this occurrence include the fact that out of 22 million publications in the world, 1.) ONLY Gawker Media was the one to undertake these attacks, 2.) for these people, 3.) against these targets 4.) as retribution following specific federal testimony. Other proof is provided by the voluminous federal investigation documents ( ie: see <http://xyzcase.xyz> or <http://communityone.info> for a tiny example of the evidence materials) including the attackers and their sponsor's own financial records published in financial disclosures.

The fates of the perpetrators of these embezzlement and conduit-operations crimes also proves the validity of the charges. Steven Rattner was indicted for securities corruption. Raj Gupta was arrested for insider trading. Solyndra was raided by the FBI. Ray Lane was indicted for massive tax fraud. Steven Chu and Eric Holder were fired for corruption and malfeasance. Fisker was ordered into a Congressional investigation. The list goes on and on and on... Gawker and Google operated the media cover-ups for the entire operation. As of today, over a million credible news articles and the President Elect of the United States of America have publicly stated facts and evidence confirming the media news manipulation that Gawker and its partner: Google have engaged in. The facts confirming conspired media attacks to cover up criminal corruption are now indisputable. International heads of state are now prepared to testify to the validity of these assertions in this case.

We have assembled a large number of law enforcement, forensic research, media and citizen reporter experts who have built case files on every criminal suspect in this case and we will not rest until restitution and justice are achieved. This matter will not be resolved until we receive our restitution! It will haunt those who do not resolve this, forever! It will track back to Univision, each Gawker employee, each Gawker investor, each Gawker "Client/Handler", and each Gawker banker. Resolve this with us now, to our satisfaction, or suffer the 100% legal consequences of the FBI-raided Solyndra-like downfalls. Gawker and its partners tried to "kill" us, failed, and now must face the consequences for their attempted political and financial manipulations.

Using 100% legal means of law enforcement and transparency, we will continue to forensically hunt down those who maliciously, and in a coordinated manner, destroyed our lives, futures, brands and incomes because of the criminal corruption and vindictive vendettas they engaged in for profiteering, greed and the mercenary manipulation of public resources.

One of the key scams that Gawker was running retribution propaganda and hit-job efforts for was Silicon Valley's Elon Musk scam to take over a TRILLION DOLLAR AFGHAN LITHIUM MINING SCAM:

[printable version](#) - [fixed-width version](#)

**Afghanistan | U.S.**

**"DIRTY" CRIMES FOR "CLEAN" ENERGY: THE AFGHANISTAN LITHIUM SCAM**  
by Lucreta Munoz  
Sunday Jun 21st, 2015 5:35 PM

"DIRTY" CRIMES FOR "CLEAN" ENERGY: THE AFGHANISTAN LITHIUM SCAM

Latest case assessment summary:  
At this point, enough evidence has accumulated to clearly prove that a mining scam was underway involving trillions of dollars of lithium, which Tesla, John Doerr and the Silicon Valley Cartel, 1.) clearly acquired the monopoly ownership of, 2.) at exactly the right moment to time it to the Afghan War, 3.) and place their associate: Steven Chu in office, 4.) and arrange the Dept. of Energy exclusive cash give-aways and 5.) tie in with Goldman Sachs commodity rigging which every suspect has now been shown to have had an operational hand in, and financial & political benefit from.

**Afghanistan: The Saudi Arabia of Lithium?**

**Lithium, which is from mobile phone nation's economy.**  
By JAMES RISEN  
Published: June 13, 2010

WASHINGTON — The United States has discovered nearly \$1 trillion in untapped mineral deposits in Afghanistan, far beyond any previously known reserves and enough to fundamentally alter the

As of late February held Ener1 Group. loan to Think Global, which is trying to emerge from bankruptcy — is held by Bzinfin, a British Virgin Islands company whose "indirect beneficial owner" is Boris Zingarevich, a Russian businessman. Zingarevich has close ties to Russian President Dmitry Medvedev and Prime Minister Vladimir Putin.

**Investing in Lithium Mining Stocks**  
**How To Profit from the Lithium Boom**  
By Brian Hicks  
Friday, October 16th, 2009  
Editor's Note:  
While Western Lithium remains trades — and possibly a third opportunity to double if not trip

**Green power corrupts**  
June 25, 2012 - 8:00 PM

**Goldman Sachs culture 'toxic'? Letter confirms suspicions about Wall Street.**  
A123 lithium-ion battery maker bankruptcy fuels criticism of President Barack Obama's alternativ

**The Saudi Arabia of Lithium**  
Brendan I. Koerner, 10.30.08, 06:00 PM EST  
Forbes Magazine dated November 24, 2008

**The gas engine made petroleum the world's biggest commodity. The electric car could do the same for the third element on the**  
**Ener1 Wants to Win Lithium Ion Battery Race**

**U.S. Identifies Vast Mineral Riches in Afghanistan**

**RUSSIAN OWNED**  
Goldman Sachs discloses ownership in Talison Lithium Corp.  
Talison Lithium Ltd.

**The problem with lithium**  
David Booth, National Post  
N chloride ring SQM creating the illucid the ultra-arid sala  
Image: CarSpace

**Lithium ion battery manufacturer Ener1 (HEV) could become the country's first lithium ion bat mass producer—if it wins a \$480M Department of Energy loan. CSNMoney has more.**

At this point, enough evidence has accumulated to clearly prove that a mining scam was underway involving trillions of dollars of lithium, which Tesla, John Doerr and the Silicon Valley Cartel, 1.) clearly acquired the monopoly ownership of, 2.) at exactly the right moment to time it to the Afghan War, 3.) and place their associate: Steven Chu in office, 4.) and arrange the Dept. of Energy exclusive cash give-aways and 5.) tie in with Goldman Sachs commodity rigging which every suspect has now been shown to have had an operational hand in, and financial & political benefit from.

Solyndra was staged to exploit indium and other related minerals from the same mining deal. Alas, the Afghan War failed, costing U.S. taxpayers (According to multiple news reports) over six trillion dollars, the Republicans found out about the "Cleantech Scam" and dissected it, almost all of the Cartel's pool of exploitation companies went out of business, the Russian portions went into cold war mode with their U.S. counter-parts and leaks from Dept. of Energy staff broke the cover-up. Senior Federal employees participated in, coordinated and benefitted from the crime.

How many Afghan farmers, soldiers and workers had to die to buy John Doerr his new mansion?

Why did federal employees get the profits from helping do this crime?

**U.S. House of Representatives**  
**Committee on Oversight and Government Reform**  
**Darrell Issa (CA-49), Chairman**



**The Department of Energy's Disastrous Management of Loan Guarantee Programs**

**STAFF REPORT**  
**U.S. HOUSE OF REPRESENTATIVES**  
**112<sup>TH</sup> CONGRESS**  
**March 20, 2012**

## **Executive Summary**

After conducting a substantial review of the Department of Energy's (DOE) loan guarantee program, it is clear that the significant losses absorbed by taxpayers as a result of Solyndra's collapse is just the beginning. The investigation conducted by the House Committee on Oversight and Government Reform has uncovered numerous examples of dysfunction, negligence and mismanagement by DOE officials, raising troubling questions about the leadership at DOE and how it has administered its loan guarantee programs.

By the expiration of § 1705 program in September 2011, the DOE had approved 27 projects totaling more than \$14.5 billion in guaranteed loans. Inexplicably, DOE management has turned a blind eye to the risks that have been glaringly apparent since the inception of the program.

This report will demonstrate how DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances demonstrating that when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration.

DOE has overseen a process wrought with misdirection, changing and expanding requirements, unexplained delays, gross mischaracterizations, and a never-ending cycle of excuses. Not only does it appear that DOE purposely directed taxpayer funds at a failing enterprise, DOE's action robbed taxpayers of genuine investment toward renewable energy.

## Key Findings

- The Committee has identified a pattern indicative of poor management and a bias toward unconstrained lending that resulted in the creation of a high risk, speculative and undiversified loan portfolio that could ultimately result in substantial loss of taxpayer dollars. (pg. 3)
- From the very inception of the program, warnings signs existed pointing to a likely loss of taxpayer dollars that went ignored by Administration officials. (pg. 7)
- DOE invested a disproportionate amount of its funds into solar technology leaving taxpayers vulnerable by overemphasizing a single technology. 16 of the 27 1705-backed projects employed solar technology – that represented 80 percent of DOE’s funds. (pg. 7)
- The billions of dollars in loan guarantees and cash grants directed at a Spanish firm, Abengoa, reveal the excessive risks associated with directing that volume of subsidy to a single firm. Abengoa managed to obtain a DOE loan commitment for the lowest rated project across the entire DOE Junk portfolio – which received an extraordinarily low CCC rating and was still approved by DOE for a direct loan to the project. This overinvestment in this single firm will likely cause substantial harm to the taxpayer. (pg. 12)
- DOE’s failure to diligently oversee costs and set prudent limitations on executive compensation while it distributed billions of dollars in loan commitments has created a significant moral hazard that has created enormous risks for DOE and taxpayer funds. (pg. 14)
- Beacon Power Corp, the second recipient of a \$ 1705 loan guarantee, paid three executives more than a quarter million dollars in bonuses in March 2010. Eighteen months later, Beacon declared bankruptcy – leaving taxpayers to repay the loan. (pg. 13)
- BrightSource Energy, recipient of a \$1.6 billion loan guarantee to build a solar generation facility, has spent more than \$56 million on a desert tortoise relocation program. BrightSource has indicated that the exploding cost of tortoise relocation program threatens to derail the entire \$1.6 billion project – leaving taxpayers on the hook for the enormous sums on money spent on construction thus far. (pg. 14)
- DOE has engaged in a disturbing pattern of suspending the approval of a credible project that adheres to all stated standards, only to later approve massive funding for a project proven to be nowhere nearly as far along in the process as DOE purported. DOE’s favoritism significantly harmed numerous companies that had relied on the promise of 1705 financing. The perception is that DOE actively misleads applicants about the status of their loan application, thereby encouraging these firms to misallocate capital, which has led to financial harm. (pg. 17-19)



- DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances showing that when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration. (pg. 22)
- Substantial evidence indicates that in two cases officials in the Loan Programs Office deliberately mischaracterized substantively identical technologies as dissimilar. Additionally, there is evidence that applicants, with the encouragement of department officials, intentionally mischaracterized their projects as "innovative" in an effort to access the Federal Financing Bank and defeat these prudential requirements. (pg. 23-28)
- There appears to be a significant amount of evidence indicating that DOE manipulated analysis and strategically modified evaluations in order to issue loans to First Solar that would qualify under the statutory guidelines. An application that should otherwise fail, but instead passes under improper influence and through manipulation of analysis, results in the defrauding of taxpayers and misappropriation of assets. (pg. 32)
- DOE Violated the Statutory Requirement that Projects Commence Construction by September 30, 2011. (pg. 32)
- In almost every public statement about its loan guarantee program, DOE touts job creation. DOE's Loan Programs Office webpage proudly proclaims that DOE expects the loans and loan guarantees to "employ" over 60,000 people. The site also breaks down the number of jobs created or saved by each loan or loan guarantee, and issues press releases for specific projects discussing job creation. These figures are misleading and attempt to pass off jobs that already existed as new jobs. (pg. 37-40)
- Solopower accepted \$40 million of Oregon taxpayer money in addition to DOE's approval of a \$197 million loan via the Federal Financing Bank (FFB). They received this federal assistance despite a rather dire prediction of Solopower's prospects by Standard & Poor's (S&P) which predicted that Solopower will fail to meet its debt obligations. (pg. 47)
- Despite warnings from both S&P and its own internal analysis regarding risky business models, DOE proceeded with a \$25 million grant for Beacon Power. In April 2010, S&P evaluated the loan guarantee project and assigned it a dismal CCC+ credit rating noting that "Beacon is currently an unprofitable start-up" and that "significant exposure to commodity price volatility" could significantly hurt the company. S&P ran two default scenarios, both of which demonstrated that taxpayers would lose millions. (pg. 49)

- Fitch Ratings evaluated the Abound Solar project, which was approved for a \$400 million conditional loan guarantee, and assigned it a junk credit rating. Fitch gave the project a credit rating of “B” (worse than Solyndra’s) with a recovery estimate of only 45%. Fitch labeled the project “highly speculative” and described Abound as lagging in technology relative to its competitors, failing to achieve stated efficiency targets, and expecting that Abound Solar will suffer from increasing commoditization and pricing pressures. Abound Solar announced on March 1<sup>st</sup> that it would stop producing solar panels and would fire 180 employees, even though it has already received \$70 million from DOE. (pg. 50-51)
- On June 15, 2010, DOE announced that it would conditionally issue a \$98.5 million partial loan guarantee to Nevada Geothermal Power Company. The loan did not finance any new construction and therefore did not help to create a single new job. Yet, in the press release for the project, Secretary Chu and Senate Majority Leader Harry Reid touted Blue Mountain’s potential, with Senator Reid stating, “I am glad to see economic recovery funding being used to put Nevadans to work on a project that will help us achieve energy independence...” DOE’s awarding of this loan guarantee raises questions about why DOE was investing significant taxpayer resources in an entity with well-established financial difficulties. Nevada Geothermal has a well documented history of major financial problems. By the time DOE conditionally approved the loan guarantee, Nevada Geothermal had already violated contract terms and debt covenants relating to financing from its primary lender, TCW. According to Nevada Geothermal’s financial statements, the firm would not avoid default without the benefit of a loan guarantee. (pg. 53-54)

## I. Introduction

### A. A History of Federal Government Loan Guarantees

For decades federal loan guarantees supported a variety of policy objectives, “including home ownership, university education, small business growth, international development, and others.”<sup>1</sup> In 1976, the Congressional Budget Office (CBO) defined loan guarantees as “a loan or security on which the federal government has removed or reduced a lender’s risk by pledging to repay principal and interest in case of default by the borrower.”<sup>2</sup> Loan guarantees supporting “clean” energy-related projects began in the 1970s as a response to the perception of record high oil prices for the foreseeable future and the notion that the country was in the midst of an “energy crisis.”<sup>3</sup>

The Energy Security Act of 1980 authorized \$20 billion for the development of a synthetic fuels industry via a new government enterprise, the U.S. Synthetic Fuels Corporation (SFC).<sup>4</sup> Loan guarantees were among the public finance tools available to SFC. The Great Plains coal gasification project was the only one of the five SFC projects to utilize a loan guarantee. The Great Plains project (located in Beulah, ND), “which converts lignite coal into pipeline-quality methane (the primary component of natural gas), received a \$2 billion federal loan guarantee (approximately \$1.5 billion of the loan guarantee was actually used) to construct the plant.”<sup>5</sup> Because the value proposition of the project hinged on gas prices remaining high for a long period of time, in 1985, when gas prices dropped below the level at which Great Plains was cost competitive, the project “was not able to meet debt service requirements and subsequently defaulted on its loan obligations.”<sup>6</sup>

The Office of Alcohol Fuels at DOE, created by the Energy Security Act of 1980, had the authority to issue \$265 million in loan guarantees for projects related to alcohol fuels.<sup>7</sup> Three projects received loan guarantees. Of them, “one had to refinance its loan, one experienced technology performance complications, and one ceased operations.”<sup>8</sup> After the failures of loan guarantees via the Energy Security Act of 1980, clean energy loan guarantees were not again funded until the American Recovery and Reinvestment Act of 2009.<sup>9</sup>

A recent report from the Congressional Research Service points out that in 1976 the Congressional Budget Office (CBO) identified inherent problems with loan guarantees that were relevant then and are still relevant today. The background paper, titled “Loan Guarantees:

---

<sup>1</sup> PHILLIP R. BROWN, CONGRESSIONAL RESEARCH SERVICE, LOAN GUARANTEES FOR CLEAN ENERGY TECHNOLOGIES: GOALS, CONCERNS, AND POLICY OPTIONS (Jan. 17, 2012), *available at* <http://www.crs.gov/pages/Reports.aspx?PRODCODE=R42152&Source=search>, [hereinafter Brown]

<sup>2</sup> CONGRESSIONAL BUDGET OFFICE, LOAN GUARANTEES: CURRENT CONCERNS AND ALTERNATIVES FOR CONTROL (Aug. 1978).

<sup>3</sup> Brown, *supra* note 1.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> Title XVII of the Energy Policy Act of 2005 created the renewable energy loan guarantee program at the Department of Energy but did not provide funding for loan guarantees. *See generally* 42 U.S.C. §§ 16511-16514.

Current Concerns and Alternatives for Control,” explains that loan guarantees disorient risk evaluation:

When commercial lenders originate loans that are guaranteed by the government, these lenders may be more concerned with the adequacy of the loan guarantee agreement than by the actual risk of the project. As a result, projects may not receive an adequate amount of due diligence by the lender, therefore increasing the federal government's risk exposure.<sup>10</sup>

The CBO also notes that “while such guarantees reduce the risk of loss to lender and borrower, they cannot reduce the project's risk of economic failure.”<sup>11</sup> Furthermore, the paper explains that loan guarantees can be attractive to Congress because the costs, on paper, appear small but fail to fully account for unforeseen risks.<sup>12</sup> Failing to heed these warnings has led to widespread taxpayer losses from loan guarantees, from Great Plains in 1985 to Solyndra and Beacon Hill in 2011.

## **B. An Overview of the DOE Section 1703 and 1705 Loan Programs**

Congress first authorized the Department of Energy's Loan Guarantee Program under title XVII of the Energy Policy Act of 2005.<sup>13</sup> The program purportedly incentivizes energy innovation by making it easier for companies to secure loans for projects that employ new technologies to promote energy efficiency, renewable energy, and advanced transmission.<sup>14</sup> Section 1703 specifically authorizes the Secretary of Energy to make loan guarantees for projects that employ innovative technology to reduce greenhouse gas emissions.<sup>15</sup> To date, the DOE has conditionally approved three projects under § 1703, totaling \$10.4 billion in guaranteed loans.<sup>16</sup>

The American Recovery and Reinvestment Act of 2009 significantly expanded the Secretary's loan guarantee authority under a newly-created § 1705.<sup>17</sup> This section authorized the Secretary to issue loan guarantees for renewable energy projects – including those employing *non-innovative* technologies – that commenced construction no later than September 30, 2011.<sup>18</sup> Additionally, in contrast to loan guarantees issued under § 1703, the project sponsor did not have to pay for the cost of the loan guarantee because the government covered the credit subsidy

---

<sup>10</sup> Brown, *supra* note 1.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> 42 U.S.C. §§ 16511-16514.

<sup>14</sup> U.S. DEP'T OF ENERGY LOAN GUARANTEE PROGRAM, LOAN GUARANTEE SOLICITATION ANNOUNCEMENT: FED. LOAN GUARANTEES FOR PROJECTS THAT EMPLOY INNOVATIVE ENERGY EFFICIENCY, RENEWABLE ENERGY, AND ADVANCED TRANSMISSION AND DISTRIBUTION TECH. (July 29, 2009) [hereinafter Innovative Solicitation].

<sup>15</sup> 42 U.S.C. § 16513(a)

<sup>16</sup> U.S. Dep't of Energy Loan Programs Office, List of Programs, *available at* [https://lpo.energy.gov/?page\\_id=45](https://lpo.energy.gov/?page_id=45)

<sup>17</sup> 42 U.S.C. § 16516

<sup>18</sup> 42 U.S.C. § 16516(a)

costs.<sup>19</sup> The short timeframe for eligibility and the congressional appropriation of the credit subsidy cost reflect § 1705's primary purpose: economic stimulus.<sup>20</sup>

The DOE issued its first § 1705 loan guarantee solicitation on July 29, 2009.<sup>21</sup> By the expiration of § 1705 program in September 2011, the DOE had approved 27 projects totaling over \$14.5 billion in guaranteed loans.<sup>22</sup> The DOE's Loan Programs Office awards and administers loan guarantees under three sets of official rules: the statutory requirements of § 1703 and 1705, the departmental regulations issued pursuant to statute, and the department's formal solicitations for loan guarantee applications.<sup>23</sup> Naturally, these rules describe the eligibility requirements with increasing specificity. The redundancy and specificity of these criteria testifies to their importance; such prudential regulations make the difference between responsible stewardship of the program and a taxpayer-financed earmark.

This initial report focuses on the Department of Energy's portfolio of loan guarantees issued under § 1705 of Title XVII. These loan guarantees were issued under two solicitations which differed in their eligibility requirements and financing method. The first solicitation targeted projects that employed innovative technologies.<sup>24</sup> Under this solicitation, the project sponsor could acquire the underlying loan from U.S. government through the Federal Financing Bank.<sup>25</sup> The second solicitation created the "Financial Institution Partnership Program."<sup>26</sup> This program accepted projects that employed *non-innovative* (i.e., already commercialized) technology, but required the project sponsor to acquire the underlying loan from a private financial institution.<sup>27</sup>

Committee staff evaluated renewable energy projects that received loan commitments from DOE or from private lenders partnering with DOE. Staff identified a pattern indicative of poor management and a bias toward unconstrained lending that resulted in the creation of a high risk, speculative and undiversified loan portfolio. In this report, we consider all aspects of loan commitments in the context of the broader marketplace to reveal the extent of the risk taxpayers face as a result of competition within the domestic energy industry and the global renewable energy industry.

### C. Overview and Brief History of the ATVM Program

---

<sup>19</sup> Innovative Solicitation, *supra* note 14 ("the Recovery Act provides that five billion nine hundred sixty five million dollars (\$5,965,000,000) in appropriated funds be made available until expended to pay the Credit Subsidy Costs").

<sup>20</sup> American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, §3(a), 123 Stat. 115 (2009).

<sup>21</sup> Innovative Solicitation, *supra* note 14.

<sup>22</sup> U.S. Dep't of Energy Loan Programs Office, List of Programs, *available at* [https://lpo.energy.gov/?page\\_id=45](https://lpo.energy.gov/?page_id=45)

<sup>23</sup> 42 U.S.C. §§16511-16516; 10 C.F.R. § 609 (2011); Innovative Solicitation, *supra* note 14; U.S. DEP'T OF ENERGY LOAN GUARANTEE PROGRAM OFFICE, LOAN GUARANTEE SOLICITATION ANNOUNCEMENT: FED. LOAN GUARANTEES FOR COMMERCIAL TECH. RENEWABLE ENERGY GENERATION PROJECTS UNDER THE FIN. INST. P'SHIP PROGRAM (Oct. 7, 2009) [hereinafter FIPP Solicitation].

<sup>24</sup> Innovative Solicitation, *supra* note 14.

<sup>25</sup> *Id.*

<sup>26</sup> FIPP Solicitation, *supra* note 23.

<sup>27</sup> *Id.*

The Advanced Technology Vehicle Manufacturing (ATVM) Program was created in 2008 as part of § 136 of the Energy Independence and Security Act of 2007.<sup>28</sup> According to the U.S. Department of Energy (DOE), the purpose of the ATVM Program is to provide “direct loans to support the development of advanced technology vehicles and associated components in the United States.”<sup>29</sup> The Energy Independence and Security Act set aside \$25 billion for direct loans and appropriated another \$7.5 billion to support these loans.<sup>30</sup> To qualify for a direct loan under the ATVM Program, the project and the sponsoring company must meet several criteria. First, in order to be eligible for a loan a company must either manufacture an advanced technology vehicle (ATV) or manufacture components for ATVs. Companies must also be “financially viable without the receipt of additional federal funding for the proposed project other than the ATVM loan.”<sup>31</sup> DOE defines “advanced technology vehicle” as a light duty vehicle that meets Clean Air Act regulations established by the U.S. Environmental Protection Agency (EPA) and is 125 percent of the average of the Corporate Average Fuel Economy (CAFE) for similar vehicles.<sup>32</sup> The loan must finance the reequipping, expanding, or establishing of a manufacturing facility in the United States or the costs of engineering integration performed in the United States.<sup>33</sup>

As of February 2012, the ATVM Program loaned \$8.3 billion to five projects.<sup>34</sup> Most notably, two of the largest companies in the country, Ford Motor Company and Nissan North America, received over \$7.3 billion to retool and upgrade manufacturing facilities for vehicles that were deemed ATVs by DOE.<sup>35</sup> Fisker Automotive and Tesla Motors received \$529 million and \$465 million, respectively, from the ATVM program.<sup>36</sup> Fisker produces plug-in hybrid electric vehicles in a manufacturing plant in Delaware.<sup>37</sup> Its first vehicle, the Karma, costs well over \$100,000 to purchase.<sup>38</sup> Tesla produces three models of plug-in electric cars at its manufacturing plant in California. Finally, The Vehicle Production Group LLC received a \$50 million loan to support the creation of a factory-built wheelchair vehicle that runs on compressed natural gas.<sup>39</sup> DOE had conditionally granted a loan of \$730 million to Severstal North America, a steel subsidiary of OAO Severstal, a multi-billion dollar Russian company, to produce

<sup>28</sup> Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

<sup>29</sup> U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, *available at* [https://lpo.energy.gov/?page\\_id=43](https://lpo.energy.gov/?page_id=43)

<sup>30</sup> Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

<sup>31</sup> U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, *available at* [https://lpo.energy.gov/?page\\_id=43](https://lpo.energy.gov/?page_id=43)

<sup>32</sup> Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

<sup>33</sup> U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, *available at* [https://lpo.energy.gov/?page\\_id=43](https://lpo.energy.gov/?page_id=43)

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> U.S. Dep’t of Energy Loan Programs Office, Projects: Fisker Automotive, *available at* <https://lpo.energy.gov/?projects=fisker-automotive>; U.S. Dep’t of Energy Loan Programs Office, Projects: Tesla Motors, *available at* <https://lpo.energy.gov/?projects=tesla-motors>

<sup>37</sup> Mike Ramsey and Neal E. Boudette, *Fisker Hires Former Chrysler CEO*, WALL ST. J., Feb. 29, 2012.

<sup>38</sup> *Id.*

<sup>39</sup> U.S. Dep’t of Energy Loan Programs Office, Projects: The Vehicle Production Group LLC, *available at* <https://lpo.energy.gov/?projects=the-vehicle-production-group-llc>



advanced high strength steel (AHSS) used to make component parts for ATVs.<sup>40</sup> Almost 100 companies have applied for loans through the program; however, an overwhelming majority still await a decision from DOE on the status of their applications.<sup>41</sup>

## II. The DOE Portfolio of Loan Commitments

DOE committed to issuing 27 loans or loan guarantees under the § 1705 program. These loan commitments total in excess of \$16 billion. At the outset, the ratings agencies rated 23 of these loans as non-investment grade categories, also known as “Junk,” due to their poor credit quality, while the other four were rated BBB, which is at the lowest end of the “investment” grade of categories. Overall, DOE’s 1705 portfolio’s initial unweighted average rating was BB-, which is considered “Junk grade.” According to Fitch, a ‘BB’ rating is speculative and indicates an elevated vulnerability to default risk.<sup>42</sup> Accordingly a BB- is on the low end of what are considered to be “speculative investments,” barely escaping the classification of “highly speculative” investments.

---

<sup>40</sup> Press Release, *Department of Energy Offers Severstal Dearborn, LLC a \$730 Million Conditional Loan Commitment for Michigan Project*, U.S. Dep’t of Energy, July 13, 2011.

<sup>41</sup> Tim Logan, *Loans for Green Car Plants are in Limbo*, Stltoday.com, Mar. 16, 2012, available at [http://www.stltoday.com/business/local/loans-for-green-car-plants-are-in-limbo/article\\_89f33f3c-6ebf-11e1-89a9-0019bb30f31a.html](http://www.stltoday.com/business/local/loans-for-green-car-plants-are-in-limbo/article_89f33f3c-6ebf-11e1-89a9-0019bb30f31a.html).

<sup>42</sup> Fitch Ratings, *Definitions of Ratings and Other Forms of Opinion* (2011), available at [http://www.fitchratings.com/web\\_content/ratings/fitch\\_ratings\\_definitions\\_and\\_scales.pdf](http://www.fitchratings.com/web_content/ratings/fitch_ratings_definitions_and_scales.pdf)

Company	Rating	Parent Rating	Recovery Estimate	Agency	Date of Rating	Date of Loan	Loan Size (Millions)	FIPP or FFB
Solyndra, Inc	BB-		89%	Fitch	8/7/2009	Sept 2009	535	FFB
Beacon Power Corporation	CCC+			S&P	4/30/2010	Aug 2010	43	FFB
Kahuku Wind Power LLC	BB+		85-90%	Fitch	5/26/2010	July 2010	117	FFB
Nevada Geothermal Power Company Inc	BB+		75-80%	Fitch	7/20/2010	Sept 2010	78.8	FIPP
Abound Solar	B		45%	Fitch	11/4/2010	Dec 2010	400	FFB
Caithness Shepherds Flat, LLC	BBB-		90-95%	Fitch	11/12/2010	Oct 2010	1040	FIPP
Abengoa Solar, Inc (Solana)	BB+	BB	80%	Fitch	12/2/2010	Dec 2010	1446	FFB
U.S. Geothermal, Inc (Malheur County, Oregon)	BB		64%	S&P	12/29/2010	Feb 2011	97	FFB
Record Hill Wind, LLC	BB+	AAA		S&P	1/7/2011	Aug 2011	102	FFB
LS Power (Transmission Line project)	BB+		90-95%	Fitch	1/21/2011	Feb 2011	343	FFB
BrightSource Energy, Inc - Ivanpah I	BB+		55%	Fitch	1/25/2011	Apr 2011	1600	FFB
BrightSource Energy, Inc - Ivanpah II	BB		55%	Fitch	1/25/2011	Apr 2011		FFB
BrightSource Energy, Inc - Ivanpah III	BB+		55%	Fitch	1/25/2011	Apr 2011		FFB
NRG Solar, LLC (Agua Caliente)	BB+	B+	90-95%	Fitch	5/13/2011	Aug 2011	967	FFB
SoloPower Inc	CCC+			S&P	7/11/2011	Aug 2011	197	FFB
NextEra Energy Resources, LLC (Genesis Solar)	BBB+	BBB+	84.50%	S&P	7/21/2011	Aug 2010	681.6	FIPP
Cogentrix of Alamosa, LLC	B		44-55%	Fitch	7/22/2011	Sept 2011	90.6	FFB
1366 Technologies Inc	B		65-70%	Fitch	7/25/2011	Sept 2011	150	FFB
Abengoa Solar, Inc (Mojave Solar)	BB	BB	70-75%	Fitch	7/27/2011	Sept 2011	1200	FFB
Granite Reliable Power, LLC	BB	BBB-	75-80%	Fitch	8/10/2011	Sept 2011	135.12	FIPP
Ormat Nevada, Inc	BB			S&P	8/13/2011	Sept 2011	280	FIPP
Exelon (Antelop Valley Solar Ranch)	BBB-	A-	90-95%	Fitch	8/17/2011	Sept 2011	646	FFB
SolarReserve Inc, LLC (Crescent Dunes)	BB		80-85%	Fitch	8/19/2011	Sept 2011	737	FFB
Prologis (Project Amp)	BB	B+	80-90%	Fitch	8/21/2011	Sept 2011	1120	FIPP
Mesquite Solar I, LLC (Sempra Mesquite)	BB+	BBB+	80-85%	Fitch	8/23/2011	Sept 2011	337	FFB
NRG Energy (California Valley Solar Ranch)	BB+	B+	85-90%	Fitch	8/23/2011	Sept 2011	1237	FFB
NextEra Energy Resources, LLC (Desert Sunlight)	BBB-	A-	85-90%	Fitch	8/24/2011	Sept 2011	1199.2	FIPP
Abengoa Bioenergy Biomass of Kansas LLC	CCC	BB	65-70%	Fitch	8/26/2011	Aug 2010	132.4	FFB

Within the range of non-investment grade credit risk, six of the Junk loans were rated at the lower tiers of the range. Specifically, these six projects or loans received ratings within either the “B” or “CCC” categories under the Fitch or Standard and Poor’s classifications.

Despite lending to highly speculative and troubled projects, the government only charged those green energy firms its own cost to borrow money. In other words, the government sought no profit or compensation for credit risk. Given the extent of losses already apparent, the failure to seek any compensation for credit risk inevitably means the taxpayer will lose substantial

funds. This is distinguishable from normal business practices, where banks or investment firms charge a premium or require more upfront capital as a condition for agreeing to finance riskier projects; thus, if the project were to go completely under, the banks would have some capital to show for the losses.

### **A. DOE's High Risk Loan Portfolio**

At an October 2011 press conference, after the collapse of Solyndra, President Obama commented on the 1705 loan portfolio saying that “we knew from the start that the loan guarantee program was going to entail some risk, by definition. If it was a risk-free proposition, then we wouldn’t have to worry about it. But the overall portfolio has been successful.”<sup>43</sup> However, the risk conceded by President Obama is larger than he or Secretary Chu have publically acknowledged. Left unsaid is the continuing and mounting risks taxpayers face with each additional disbursement of funds.

As this report reveals, it appears that taxpayer losses associated with Solyndra are just the tip of the iceberg. Clues warning of this risk have been apparent from the inception of the program. This does not bode well for the future of DOE’s loan portfolio. Moreover, most of the energy projects funded under 1705 continue construction or just plan to begin construction. As projects proceed and spend their capital, additional weaknesses will be exposed and more loan recipients will begin to fail.

Secretary Chu has done very little to mitigate these risks. In the first instance, DOE failed to abide by the number one investment rule of thumb – diversify your portfolio. Instead of making investments in a broad range of emerging technologies, DOE sunk 80% of its funds into either solar manufacturing or solar generation projects.<sup>44</sup> This overemphasis on one type of technology leaves taxpayers vulnerable to changes in the market for solar energy. After Solyndra collapsed, Energy Secretary Steven Chu claimed that “this company and several others got caught in a very, very bad tsunami” and then blamed China and the recession in Europe.<sup>45</sup> Secretary Chu neglected to mention the extraordinarily clear warning by Fitch Ratings (Fitch) prior to DOE’s commitment. Specifically, Fitch stated:

[C]hanges in business or economic conditions center upon the intermediate and longer term pricing of PV solar panels which are now under extreme competitive pressures. Fitch expects PV pricing pressures throughout the term of the DOE loan and this factor will be the largest challenge facing Solyndra and the largest credit risk incurred in repayment of the Fab 2 loan according to its terms.<sup>46</sup>

As the above excerpt reveals, prior to approving Solyndra, Fitch warned DOE that extreme competition within the solar panel market threatened pricing of solar panels in the coming months and years and that this was the greatest risk to Solyndra’s survival. Even

---

<sup>43</sup> News Conference by the President, The White House (October 6, 2011), *available at*: <http://www.whitehouse.gov/the-press-office/2011/10/06/news-conference-president>.

<sup>44</sup> U.S. Dep’t of Energy, Loan Program office, Our Projects, *available at* [https://lpo.energy.gov/?page\\_id=45](https://lpo.energy.gov/?page_id=45)

<sup>45</sup> Matthew Wald, *Panel Hears Defense of Loan to Solyndra*, N.Y. TIMES, Nov. 17, 2011, *available at*: <http://www.nytimes.com/2011/11/18/business/energy-environment/energy-secretary-defends-solyndra-loan.html>.

<sup>46</sup> Solyndra rating report letter to Wilbeur Stover, FitchRatings, p.1 (August 7, 2009).

knowing this, DOE chose to invest billions of taxpayer dollars despite the clear warning - 16 of the 27 section 1705-backed projects employed solar technology,<sup>47</sup> the very technology that experts were warning about. These loans for solar projects totaled more than \$13 billion – more than 80% of the total portfolio. DOE also concentrated its investments in two solar companies in particular, Abengoa and First Solar, to such an extent that financial troubles with either company would affect a significant portion of the loan portfolio. In addition to over investing in solar, the Federal government also permitted “double dipping,” wherein a company received multiple federal grants and loans to cover the cost of a project, thereby reducing the company’s “skin in the game.” DOE also allowed large and financially sound parent entities to undercapitalize their loan guarantee projects, which effectively shifted the risk away from the company to the taxpayer. It appears that for most DOE loan recipients, a low cost loan, in and of itself was insufficient to attract private investors.

In compiling this report, staff considered many troubling issues that deserve attention, yet, because of the magnitude of problems associated with this program, only a share of the concerns could be investigated. Committee staff, therefore, considers this an initial report. The following sections examine the various actions that DOE took while building its financially vulnerable portfolio that jeopardizes billions in taxpayer funds.

## **B. Major Risk Factors to the Loan Portfolio**

### *1. Falling Natural Gas Prices Hurt Renewable Projects*

In addition to the poor credit risk determinations of 1705 recipients, the falling price of natural gas poses a material risk to the sustainability of these renewable energy projects. This section of the report attempts to explain how the market for natural gas has evolved and how it interacts with the market for renewable technologies.

Advances in hydraulic fracturing (“fracking”) technology over recent years dramatically improved domestic natural gas and natural gas liquids production. Over the past few months, in particular, this increase in production resulted in an extraordinary decline in the domestic price of natural gas, substantially widening the efficiency gap between fossil fuels and renewable technologies.<sup>48</sup> In other words, natural gas has become so cheap that other energy technologies are having difficulty competing, even after federal subsidies.

The high price of oil incentivizes fracking for natural gas liquids, which supply valuable raw materials to oil refiners.<sup>49</sup> In areas where fracking produces both natural gas and gas liquids, frackers often produce natural gas at a loss, but, in the aggregate, profit due to the high price of gas liquids.<sup>50</sup> This unique result reduces the responsiveness of natural gas producers to the price

---

<sup>47</sup> U.S. Dep’t of Energy, Loan Program office, Our Projects, *available at* [https://lpo.energy.gov/?page\\_id=45](https://lpo.energy.gov/?page_id=45)

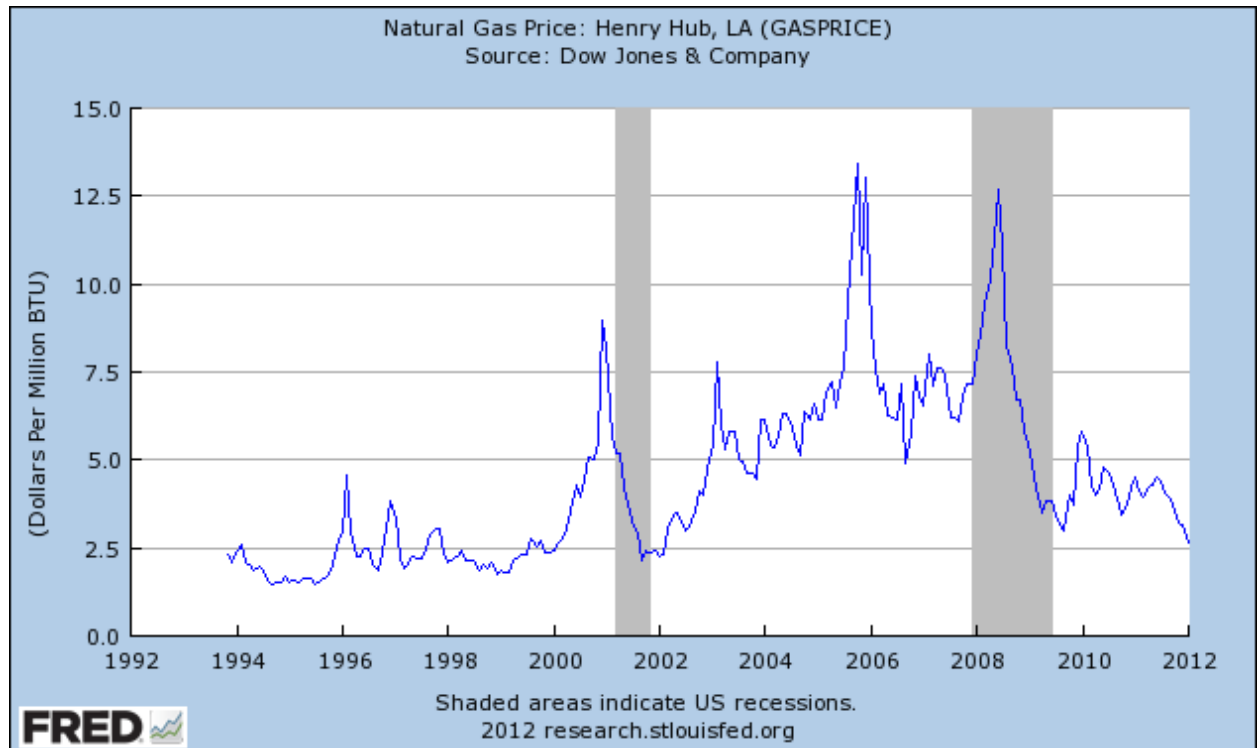
<sup>48</sup> See U.S. Energy Info. Admin., Monthly Natural Gas Gross Withdrawals, *available at* <http://205.254.135.7/dnav/ng/hist/n9010us2m.htm>.

<sup>49</sup> See Natural Gas Supply Ass’n, Processing Natural Gas, *available at* [http://www.naturalgas.org/naturalgas/processing\\_ng.asp#seperateng](http://www.naturalgas.org/naturalgas/processing_ng.asp#seperateng); see also Emanuel V. Ormonde, IHS Inc., Natural Gas Liquids, *available at* <http://chemical.ihs.com/CEH/Public/Reports/229.2500/>

<sup>50</sup> See Peter Gardett, AOL Energy, A Little Liquid Gas and Oil Goes a Long Way for Energy Producers (Feb. 17, 2012), *available at* <http://energy.aol.com/2012/02/17/a-little-liquid-gas-and-oil-goes-a-long-way-for-energy-producers/>

of natural gas. This ability to continue to profit from the premium price of gas liquids changes the economics of natural gas production enabling a secular decline in natural gas prices.

The resulting low natural gas price reduces the market price for power generation in most areas, as natural gas fired generators usually set the market clearing price. Below is a chart reflecting natural gas prices since 1992.<sup>51</sup> Today's low prices for natural gas have not been seen since the 1990's and, when adjusted for inflation are at historically low levels. While this is good news for consumers of electricity who will benefit from lower rates, this is bad news for the renewable energy industry.



*a. Low Natural Gas Prices Reduce Power Purchase Agreement Revenues for Renewable Projects*

As natural gas powered generation provides the market clearing price in most regions within the United States, the recent drop in natural gas prices lowered market prices for power. These falling power prices reduce the expected value of anticipated Power Purchase Agreements (PPAs), which are agreements that provide power purchasers, such as utilities and suppliers of energy, such as renewable energy generators, with certainty over future prices. The energy industry relies on PPAs to manage risks associated with the purchase and sale of power. The pricing of PPAs largely depends on expectations with regard to future power prices. The recent

<sup>51</sup> Federal Reserve Bank of St. Louis, Economic Data, Natural Gas Price: Henry Hub, Louisiana, available at <http://research.stlouisfed.org/fred2/series/GASPRICE>

collapse in natural gas prices reduced the potential revenue for PPAs that have not yet been executed.

Lower natural gas prices increase the risks of renewable energy projects that have not yet entered into long term contracts to sell the power they expect to generate because buyers of their product now have cheaper options. Project Amp and other projects that fail to meet benchmarks necessary to maintain a PPA, suffer the risk that they cannot negotiate agreements sufficient to support the cost of the renewables project, even with the benefit of multiple substantial subsidies.

Accordingly, it is reasonable to expect utilities to seek an exit from expensive PPAs whenever the renewable company fails to meet certain benchmarks, whether those benchmarks relate to commercial operation date, insufficient output, reliability or other variables. In other words, given the falling price of power in areas where natural gas is the marginal supplier, it is reasonable to expect revenues from risky renewables projects to be at risk to these falling power prices. If a PPA with a solar producer reflects a price based on markets where \$4.00 per million British thermal unit (MMBtu) of natural gas was prevalent, the utility paying for that solar power might act on any opportunity to renegotiate or exit the unprofitable PPAs now that natural gas prices are below \$3.00. Specifically, as DOE-backed projects come online over the next few years, any failure to meet the production or capacity requirements stated in the PPA may enable the power purchaser to exit or renegotiate the contract, subjecting the renewable project to lower power prices, and thus lower revenues for the company than was predicted at the time DOE negotiated the loan agreement.

In other words, given that power prices have fallen since these projects executed PPAs, there is substantial risk that the power purchasers will find a way out from the PPAs they entered into with the renewable projects. A PPA provides the renewable project security that it will earn a specific amount of revenue. If a party, such as a Utility, that is purchasing power from the renewables project can find a way out of the PPA, this places the revenue of the project at risk. If the renewable projects are forced to renegotiate at current market prices, they will suffer a substantial loss of revenue.

This is particularly concerning in the case of newer technologies, where many of these projects may fail to achieve target operation dates, or may not generate as much power as the contract requires simply as a matter of not having enough experience with the newer technology. Given this risk, many of these projects face the danger of losing the benefit of a higher priced PPA.

One good example comes from the recent reports that First Solar's solar panels are suffering higher failure rates in the desert. This unexpected underperformance will reduce the output of their plants. Such output is a key performance variable considered in the PPA.

*b. Low Gas Prices Reduce Demand for Solar Panels*

Falling market prices for power as described above impacts all aspects of renewable projects. Despite solar panel prices, the *demand* for solar panels declines as the relative economic benefits of their installation fall. Solar companies currently suffer from excessive competition in panel manufacturing, and also likely face decreasing demand as a result of the competition from cheaper natural gas generation. To the extent low natural gas prices persist,

this represents a sea-change that threatens the viability of all solar manufacturing investment that DOE and Treasury subsidized.

## **2. DOE's Failure to Diversify**

### *a. DOE Overinvests in Solar Manufacturing despite Ample Warnings*

DOE should have averted some of the risks it created in its portfolio by diversifying its investments across renewable energy technologies. DOE's investment in multiple solar manufacturers added to a heated global competition that was already creating an excessive supply of solar panels. These manufacturers were forced to compete both against each other and other solar companies worldwide. As a result, the average selling price per watt for solar panels has continued its decline.

Despite Solyndra's fall, there remains excessive competition in the manufacturing of solar panels. Just this past month, both Abound Solar and First Solar cut solar panel production globally, reflecting this excessive supply and heated competition.<sup>52</sup> While U.S. solar generation projects can take advantage of falling panel prices to offset a share of the impact of reduced power prices, it appears solar *manufacturers* that suffer both supply and demand shocks can only survive through continued provision of subsidies. Unfortunately for these manufacturers, there is growing evidence that the subsidies are drying up.

With regard to subsidies on a global scale, Germany, the leader in solar subsidies, having invested over \$130 billion to date, is now giving up the habit. According to news reports:

Germany once prided itself on being the “photovoltaic world champion”, doling out generous subsidies—totaling more than \$130 billion, according to research from Germany's Ruhr University—to citizens to invest in solar energy. But now the German government is vowing to cut the subsidies sooner than planned and to phase out support over the next five years. What went wrong?

Using the government's generous subsidies, Germans installed 7.5 gigawatts of photovoltaic capacity last year, more than double what the government had deemed “acceptable.” It is estimated that this increase alone will lead to a \$260 hike in the average consumer's annual power bill.

According to Der Spiegel, even members of Chancellor Angela Merkel's staff are now describing the policy as a massive money pit. Philipp Rösler,

---

<sup>52</sup> Cassandra Sweet and Ryan Tracy, *Loan Recipient Abound to Cut Jobs, Retool Colorado Factory*, WALL ST. J., Feb. 29, 2012, available at <http://online.wsj.com/article/BT-CO-20120229-719672.html>; Ehren Goossens, *Solar Suppliers Head for First Demand Drop as Subsidy Cut*, BLOOMBERG NEWS, Mar. 9, 2012, available at <http://www.bloomberg.com/news/2012-03-09/solar-panel-sales-seen-dropping-first-time-in-decade-feeding-glut-energy.html>



Germany's minister of economics and technology, has called the spiraling solar subsidies a "threat to the economy."<sup>53</sup>

The ratings agencies fully informed the DOE of their expectations for falling panel prices due to excessive global competition. Both Germany and the U.S. appear to be phasing out subsidies over the coming years, and this should eventually help reduce the excessive supply; however, it does so at the expense of the subsidized solar firms. In other words, the apparent cure to the oversupply is the outright shuttering of a large share of solar panel manufacturers worldwide.

*b. DOE Overinvested in Abengoa and First Solar Projects*

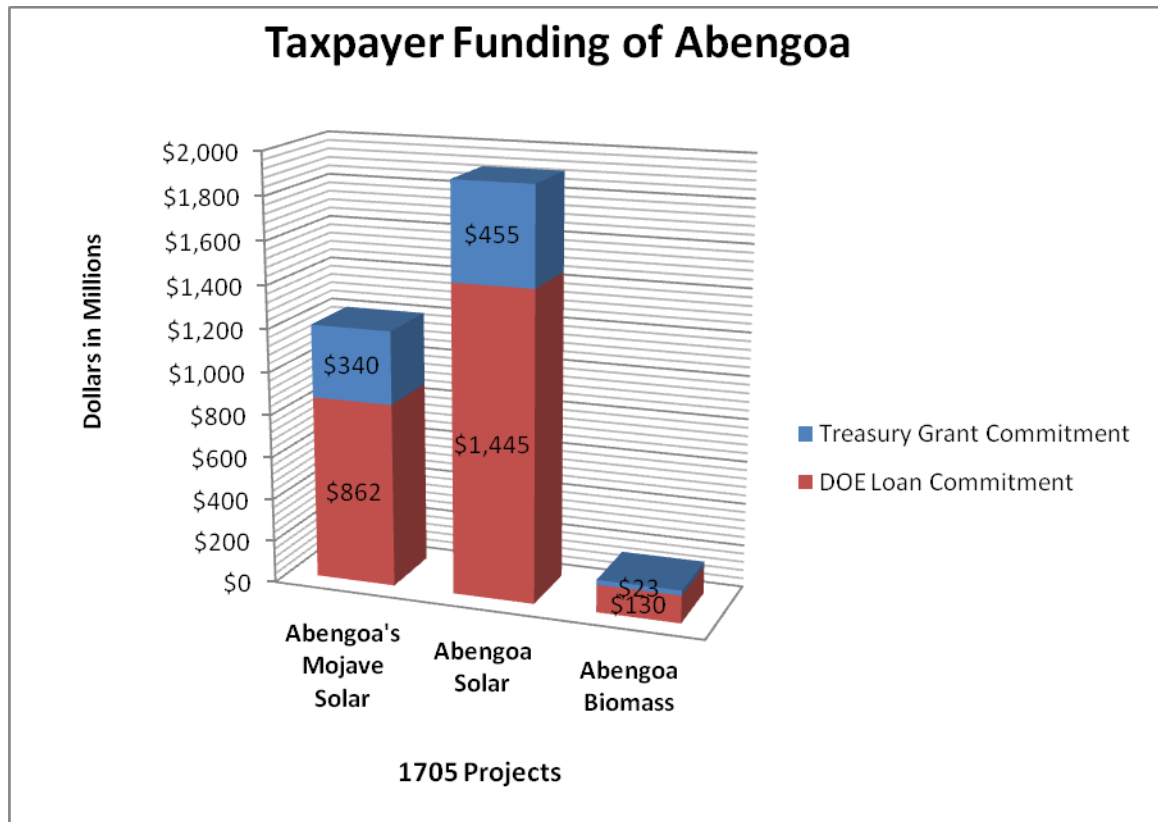
As DOE failed to diversify the portfolio sufficiently across industries, DOE also failed to diversify across award recipients. A single Spanish firm, Abengoa, received an aggregate \$2.45 billion in loans and loan guarantees plus \$818 million in Treasury cash grants.<sup>54</sup> This reveals excessive risk and subsidies provided to a single firm via multiple subsidiaries. Abengoa has a credit rating of BB, which is considered Junk, thus making this concentration of investment in one company speculative and highly questionable. Exemplifying the risk DOE took in the case of Abengoa, Abengoa managed to obtain a DOE loan commitment for the lowest rated project across the entire DOE Junk portfolio; Abengoa Bioenergy Biomass of Kansas received an extraordinarily low CCC rating and yet the DOE approved a direct loan to the project.<sup>55</sup>

---

<sup>53</sup> Bjørn Lomborg, *Germany is cutting solar-power subsidies because they are expensive and inefficient*, SLATE, Feb. 18, 2012, available at [http://www.slate.com/articles/news\\_and\\_politics/project\\_syndicate/2012/02/why\\_germany\\_is\\_phasing\\_out\\_its\\_solar\\_power\\_subsidies\\_.html](http://www.slate.com/articles/news_and_politics/project_syndicate/2012/02/why_germany_is_phasing_out_its_solar_power_subsidies_.html)

<sup>54</sup> See FitchRatings credit report for Mojave Solar, LLC, dated July 27, 2011, where DOE committed to an \$862 million loan and Treasury committed to a \$340 million grant; FitchRatings credit report for Abengoa Solar, Inc.'s Solana Generating Station, dated December 2, 2010, where DOE committed to a \$1.445 billion loan guarantee and the Treasury committed to a \$455 million grant; and, FitchRatings credit report for Abengoa Bioenergy Biomass of Kansas, dated August 26, 2011, where DOE committed to a \$130 million loan and Treasury committed to a \$23 million grant.

<sup>55</sup> See FitchRatings credit report for Abengoa Bioenergy Biomass of Kansas, dated August 26, 2011.



Abengoa's prospects look dim due to its investments in Europe, particularly Spain, and suffer the risk of declining subsidies as Spain contends with its own declining credit quality and the potential need for a bailout of its own government in the coming months or years. Now that Germany and Spain cut back solar subsidies, this will undoubtedly harm the European renewable investments of Abengoa.<sup>56</sup> Even if Abengoa investments initially appeared attractive to DOE, overinvestment in this single firm will likely cause substantial harm to the taxpayer. DOE similarly overinvested in First Solar, as we describe in Section III; the taxpayer will undoubtedly suffer losses from that investment as well.

### 3. DOE Allowed "Double Dipping" – Multiple Subsidies to Single Projects

The junk quality loan portfolio of loan guarantees amassed by DOE reflects funding that substantially exceeds the amounts loaned by DOE. To understand the full extent of funds invested into these renewable firms, all state and federal subsidies need to be considered. For example, most of the 1705 projects benefitted from multiple enormous subsidies, such as grants that covered a third of the cost to build a generation facility, low interest DOE loans, state subsidies, beneficial access to power grids and mandates that require renewable production

<sup>56</sup> See Ben Sills, *Spain Halts Renewable Subsidies to Curb \$31 Billion of Debts*, BLOOMBERG NEWS, Jan. 27, 2012, available at <http://www.bloomberg.com/news/2012-01-27/spain-suspends-subsidies-for-new-renewable-energy-plants.html>. See also Germany to Axe Solar Panel Installations by More than Half in 2012 (Jan. 19, 2012), available at <http://www.greenworldinvestor.com/2012/01/19/germany-to-axe-solar-panel-installations-by-more-than-half-in-2012/>.

known as renewable portfolio standards. Such mandates result in premium pricing for power generated by renewable technologies.<sup>57</sup>

Even with the benefit of these massive government subsidies, DOE continues to hold a portfolio of “Junk” grade loans and commitments. This defies the natural assumption that layer upon layer of government subsidies, and billions in costless equity should at some point cause an entity to become profitable; however, given the poor quality of the DOE portfolio, this has failed to occur.

#### *4. DOE Allowed Large Energy Companies to Undercapitalize Projects and Shifted Risk to Taxpayers*

Even when a company had significant assets to cover a project, DOE put the taxpayer at a greater risk because of the way they structured the guarantee. In four cases among the 27 loan guarantees and Federal Financing Bank (FFB) loans, the parent or project sponsor that sought the benefit of a loan guarantee or FFB loan had a credit rating significantly above that of the project itself. In other words, in four cases, the borrower undercapitalized the project and refused to extend a parental guarantee.

As a result, the taxpayer takes on greater risk, despite the borrowers’ ability to increase funding to the project. The most egregious use of this technique was in the case of Record Hill, LLC, where AAA rated Yale University created a project with a rating of only BB+. The idea that Yale would take a substantial taxpayer subsidy and still seek to protect its remaining assets from the liabilities of Record Hill reflects Yale’s view of the Record Hill project and its disregard for taxpayers. It is inconceivable that any normal bank would take these kinds of risk when loaning money. Banks traditionally insist on a number of provisions to “protect” their investment. Yet DOE and Treasury did just the opposite, and essentially let these companies dictate terms favorable to them and not to the taxpayer. The result is when the company defaults on their obligations, the taxpayer is left with little to no remedy.

### **3. Systemic Risks from “Crony Capitalism” and Wasteful Spending**

There is evidence a number of loan guarantee recipients have engaged in clearly profligate spending. Such wasteful spending threatens the financial viability of the recipient companies, creating risks to both the DOE’s loan commitment portfolio and taxpayer dollars. It is particularly troubling that this waste often takes the form of large cash bonuses to company executives – such payments feed the perception that taxpayer funds are being used to line the pockets of green energy executives.

Beacon Power Corp, the second recipient of a \$ 1705 loan guarantee, paid three executives more than a quarter million dollars in bonuses in March 2010.<sup>58</sup> Eighteen months

---

<sup>57</sup> See M.J. Beck Consulting LLC, Renewable Portfolio Standards, *available at* [http://mjbeck.emtoolbox.com/?page=Renewable\\_Portfolio\\_Standards](http://mjbeck.emtoolbox.com/?page=Renewable_Portfolio_Standards) (“With few exceptions, utilities are allowed to recover the additional cost of procuring renewable power.”); *see also* Katerina Dobesova, Jay Apt, and Lester B. Lave, *Are Renewable Portfolio Standards Cost-effective Emission Abatement Policy?* (Carnegie Mellon Electricity Industry Center, Working Paper CEIC-04-06), *available at* [http://wpweb2.tepper.cmu.edu/ceic/pdfs/CEIC\\_04\\_06.pdf](http://wpweb2.tepper.cmu.edu/ceic/pdfs/CEIC_04_06.pdf).

later, Beacon declared bankruptcy, leaving taxpayers to repay the loan. Adding insult to this injury, these bonuses were explicitly linked to the executives securing the DOE loan guarantee. Similarly, bankruptcy records show Solyndra doled out executive payments just months prior to its late August collapse and early September bankruptcy.<sup>59</sup> In Solyndra's case, former executives have stated that DOE explicitly allowed federal funds to be used to pay out executive bonuses.

The Department appears to recognize the unacceptability of this crony capitalism. DOE has stated, "We take our role as stewards of taxpayer dollars very seriously, and as such, we will make clear to loan recipients our view that funds should not be directed toward executive bonuses when the rest of the company is facing financial difficulty."<sup>60</sup> The DOE has not explained why they waited three years into the program to finally take this view, or what – if any – concrete steps they will take to protect taxpayer monies.

Good government groups have severely criticized the DOE's administration of the loan guarantees with respect to executive compensation. Citizens Against Government Waste has stated that "[g]iving a bonus to the executives under these circumstances is rewarding failure with our money with no chance of getting it back. Taxpayers need some representation here. They didn't really get it."<sup>61</sup>

Wasteful spending is not limited to executive compensation alone. BrightSource Energy, recipient of a \$1.6 billion loan guarantee to build a solar generation facility, has spent more than \$56 million on a desert tortoise relocation program.<sup>62</sup> Furthermore, BrightSource will build 50 miles of intricate fencing, at a cost of up to \$50,000 per mile, designed to prevent relocated tortoises from climbing or burrowing back into the solar generation facility.<sup>63</sup> BrightSource has indicated that the exploding cost of tortoise relocation program threatens to derail the entire \$1.6 billion project – leaving taxpayers on the hook for the enormous sums on money spent on construction thus far.

The DOE's failure to diligently oversee costs and set prudent limitations on executive compensation while it distributed billions of dollars in loan commitments created a significant moral hazard that has created enormous risks for DOE and taxpayer funds.

### **C. Harm Posed to Our Economy**

The DOE loan guarantee and ATVM loan programs may harm capital formation within the capital markets. As the government makes low cost loans available, private capital cannot compete with the subsidized low interest loans. As a result, many private investors and lenders cease to compete in the same space or may choose to invest in those subsidized firms that anticipate government loans. As intended, government subsidies redirect capital to less efficient

---

<sup>58</sup> Ronnie Greene and Matthew Mosk, *Green Firms Get Fed Cash, Gives Execs Bonuses, Fail*, ABC NEWS, Mar. 6, 2012, available at <http://abcnews.go.com/Blotter/green-firms-fed-cash-give-execs-bonuses-fail/story?id=15851653#.T1ZAcnm8hSx>

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

<sup>62</sup> Julie Cart, *Saving desert tortoises is a costly hurdle for solar projects*, L.A. TIMES, Mar. 4, 2012.

<sup>63</sup> *Id.*

industries, causing a misallocation of capital. To the extent investors target subsidized firms, those funds that would have sought a more profitable opportunities that would have yielded greater efficiencies and benefits for the economy, instead invest in relatively less profitable industries, where the government subsidy compensates for the lost profit.

To the extent government loans programs proceed, the government must maintain the highest integrity in the allocative process. If government fails to impose a fair and impartial loan process that prioritizes genuinely eligible borrowers, then the government further misallocates capital within the subsidized industry, increasing economic harm. Relatively better businesses may suffer losses while waiting for subsidies that never materialize. Lower quality firms, with strong political ties, may succeed in gaining government support with inferior products, reflecting a multi-factored misallocation of capital.

The failure to maintain integrity and abide by the law when implementing the DOE loan program significantly impacts those that failed to receive subsidies as well. On February 28, 2012, Bright Automotive announced it was shutting down operations. In a poignant and blunt letter to the Secretary, Bright Automotive's management team laid the blame squarely on the unprofessionalism and mismanagement of the DOE loan guarantee program. Bright Automotive described a process wrought with misdirection, changing and expanding requirements, unexplained delays, gross mischaracterizations, and a never-ending cycle of excuses:

*Bright Automotive*

*February 28, 2012*

*Secretary Steven Chu  
U.S. Department of Energy  
Washington, D.C.*

*Dear Secretary Chu,*

*Today Bright Automotive, Inc will withdraw its application for a loan under the ATVM program administered by your department. Bright has not been explicitly rejected by the DOE; rather, we have been forced to say "uncle". As a result, we are winding down our operations.*

*Last week we received the fourth "near final" Conditional Commitment Letter since September 2010. Each new letter arrived with more onerous terms than the last. The first three were workable for us, but the last was so outlandish that most rational and objective persons would likely conclude that your team was negotiating in bad faith. We hope that as their Secretary, this was not at your urging.*

*The actions -- or better said "lack of action" -- by your team means hundreds of great manufacturing and technical jobs, union and non-union alike, and thousands of indirect jobs in Indiana and Michigan will not see the light of day. It*

*means our product, the Bright IDEA plug-in hybrid electric commercial vehicle, will not provide the lowest total cost of ownership for our commercial and government fleet customers, saving millions of barrels of oil each year. It means turning your back on a bona fide step forward in our national goal to wean America away from our addiction to foreign oil and its implications on national security and our economic strength.*

*In good faith we entered the ATVM process, approved under President Bush with bi-partisan Congressional approval, in December of 2008. At that time, our application was deemed "substantially complete." As of today, we have been in the "due diligence" process for more than 1175 days. That is a record for which no one can be proud.*

*We were told by the DOE in August of 2010 that Bright would get the ATVM loan "within weeks, not months" after we formed a strategic partnership with General Motors as the DOE had urged us to do. We lined up and agreed to private capital commitments exceeding \$200M – a far greater percentage than previous DOE loan applicants. Finally, we signed definitive agreements with state-of-the-art manufacturer AM General that would have employed more than 400 union workers in Indiana in a facility that recently laid-off 350 workers. Each time your team asked for another new requirement, we delivered with speed and excellence.*

*Then, we waited and waited; staying in this process for as long as we could after repeated, yet unmet promises by government bureaucrats. We continued to play by the rules, even as you and your team were changing those rules constantly – seemingly on a whim.*

*Because of ATVM's distortion of U.S. private equity markets, the only opportunities for 100 percent private equity markets are abroad. We made it clear we were an American company, with American workers developing advanced, deliverable and clean American technology. We unfortunately did not aggressively pursue an alternative funding path in China as early as we would have liked based on our understanding of where we were in the DOE process. I guess we have only ourselves to blame for having faith in the words and promises of our government officials.*

*The Chairman of a Fortune 10 company told your former deputy, Jonathan Silver, that this program "lacked integrity"; that is, it did not have a consistent process and rules against which private enterprises could rationally evaluate their chances and intelligently allocate time and resources against that process. There can be no greater failing of government than to not have integrity when dealing with its taxpaying citizens.*

*It does not give us any solace that we are not alone in the debacle of the ATVM process. ATVM has executed under \$50 million of transactions since October of 2009. Going back to the creation of the program, only about \$8 billion of the*

*approved \$25 billion has been invested. In the meantime, countless hours, efforts and millions of dollars have been put forth by a multitude of strong entrepreneurial teams and some of the largest players in the industry to advance your articulated goal of advancing the technical strength and clean energy breakthroughs of the American automotive industry. These collective efforts have been in vain as the program failed to finance both large existing companies and younger emerging ones alike.*

*Our vehicle would have been critical to meet President Obama's stated goal of one million plug-in electric vehicles on the road in 2015 and his commitment to buy 100 percent alternative fueled vehicles for the Federal Fleet. So, we are not the only ones who will be disappointed.*

*The ineffectiveness of the DOE to execute its program harms commercial enterprise as it not only interfered with the capital markets; it placed American companies at the whim of approval by a group of bureaucrats. Today at your own ARPA-E conference, Fred Smith, the remarkable leader of FedEx, made the compelling case to reduce our dependence on oil; a product whose price is manipulated by a cartel which has caused the greatest wealth transfer in our history from the pockets of working people and businesses to countries, many of whom are not our allies. And yet, having in hand a tremendous tool for progress in this critically strategic battle -- a tool that drew the country's best to your door -- you failed not only in the deployment of funds from ATVM but in dissipating these efforts against not just false hope, but false words. For us, this is a particularly sad day for our employees and their families, as well as the employees and families of our partners. We asked our team members on countless occasions to work literally around the clock whenever yet another new DOE requirement came down the pike, so that we could respond swiftly and accurately. And, we always did.*

*Sincerely,*

*Reuben Munger  
CEO*

*Mike Donoughe  
COO<sup>64</sup>*

Bright Automotive is not alone in its frustration, as at least three additional companies, U.S. Geothermal, Inc., RenTech, and Tenaska, have suffered substantial harm at the hand of DOE's favoritism and blatant disregard of the law.

*U.S. Geothermal, Inc.*

U.S. Geothermal, Inc. submitted a DOE loan guarantee application for a geothermal power project in San Emidio, California. Like Bright Auto, U.S. Geothermal received several "clear assurances the DOE considers San Emidio a priority project and that [the] credit review

---

<sup>64</sup> Letter, Reuben Munger and Mike Donoughe, Bright Automotive, to the Honorable Steven Chu, Sec'y of Energy, Feb. 28, 2012 (on file with author).

process could be accomplished within the required timeframe.”<sup>65</sup> Relying on these statements and assurances, U.S. Geothermal took action to advance the project and ensure full readiness and compliance with DOE’s stated requirements. The company incurred numerous expenses, including fees to legal counsel and engineers, as well as resources devoted to the completion of engineer reports and a term sheet.<sup>66</sup> Most significantly, consistent with a DOE requirement for priority treatment within the 1705 program, U.S. Geothermal executed a 25 year PPA.<sup>67</sup>

U.S. Geothermal has taken every step to ensure that the San Emidio project embodies the “quality” and “readiness” requirements DOE has emphasized. The project, which “would be one of the smaller and more straight-forward transactions,” was ready to enter the credit approval process by May 2011, only to be abruptly notified that DOE decided to suspend work on this loan guarantee.<sup>68</sup>

DOE, in a draft letter to U.S. Geothermal, stated “there are a number of projects that are closer to the conditional commitment stage than yours, and we expect these projects, if they reach financial close, to utilize all of our remaining appropriation.”<sup>69</sup> In this draft letter, Jonathan Silver further provided that “the decision does not reflect the merits of the project, but rather the timing and funding constraints of the program.”<sup>70</sup> This claim is dubious at best. As is revealed in Section III of this report, Project AMP failed to meet the eligibility requirement relating to commencement of construction; nonetheless, it received a \$1.4 billion FIPP-based DOE loan guarantee commitment on September 30, 2011. Antelope Valley Solar Ranch failed to meet the “innovativeness” requirement and the “one technology per sponsor rule.” Despite this, Antelope Valley succeeded in gaining a \$646 million FFB direct loan commitment. These two projects consumed an enormous share of DOE’s appropriation yet clearly were not “closer to the conditional commitment stage.”

According to its letter, U.S. Geothermal suffered substantial harm as a result of DOE’s decision to violate the terms of its own program in providing loan commitments to ineligible projects. The company incurred significant expenses in its efforts to meet DOE’s standards and secure the financing it needed to proceed. The greatest harm will result from the PPA U.S. Geothermal entered into in reliance on DOE statements, which now contractually obligates them to provide power for 25 years or suffer penalties.<sup>71</sup> According to U.S. Geothermal’s letter, in the absence of a DOE loan guarantee, the terms of the PPA create a significant obstacle to obtaining commercial financing for their project going forward.<sup>72</sup>

### *Rentech*

---

<sup>65</sup> Letter, Daniel Kunz, U.S. Geothermal President & CEO, to Jonathan Silver, U.S. Dep’t of Energy Loan Program Office, Executive Director (May 11, 2011).

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> Draft letter, Jonathan Silver, U.S. Dep’t of Energy Loan Program Office, Executive Director, to Daniel Kunz, President of U.S. Geothermal (no bates stamp and no date).

<sup>70</sup> *Id.*

<sup>71</sup> Letter, Daniel Kunz, U.S. Geothermal President & CEO, to Jonathan Silver, U.S. Dep’t of Energy Loan Program Office, Executive Director (May 11, 2011).

<sup>72</sup> *Id.*



Rentech submitted a proposal for financing for its Northwest Florida Renewable Energy Center Project (NWFREC). Like Bright Automotive and U.S. Geothermal, Rentech had progressed according to plan and adhered to DOE's prescribed schedule. In coordination with DOE staff, Rentech had taken such steps as signing sponsor payment letters, setting up necessary infrastructure, and entering the due diligence process.<sup>73</sup>

Despite making every effort to fulfill all the requirements DOE laid out, DOE, again, unexpectedly suspended the approval process for the NWFREC Project.<sup>74</sup> Given the steps Rentech took to ensure all requirements were being fulfilled, DOE seems to have made a decision based on favoritism rather than the law, choosing to fund larger, ineligible projects over a number of more suitable alternatives.

### *Tenaska*

Tenaska sought financing for Imperial Solar Energy Center South (IESC South), a solar power project in Imperial County, California. Like the others, this company also received a letter from DOE suspending the loan approval process, indicating that other projects were closer to the conditional offer stage.<sup>75</sup> Given the steps Tenaska appears to have taken prior to the suspension, this is unlikely.

Prior to receipt of DOE's letter, Tenaska had been working in coordination with DOE staff and was finalizing the execution of the required term sheet.<sup>76</sup> Additionally, the company was progressing through the due diligence stage and expected its preliminary Credit Assessment from Fitch in the very near future.<sup>77</sup> It appears that, once again, DOE suspended the approval of a credible project adhering to all stated standards and working closely with DOE staff, only to later approve massive funding for a project proven to be nowhere nearly as far along in the process as DOE purported. DOE's favoritism significantly harmed yet another company that had relied on the promise of 1705 financing.

The similarity of concerns and claims made by Bright Automotive, U.S. Geothermal, Rentech and Tenaska make clear that DOE actively mislead applicants about the status of their loan applications, thereby encouraging these firms to misallocate capital, which has led to financial harm. When considered in the context of the excessively large loan guarantees provided to Abengoa, First Solar and ProLogis, and the outright violations associated with Antelope Valley and Project AMP, the claims of these companies bring to light the extent of harm that can result when a regulator fails to maintain integrity and allows inappropriate bias and influence to distort its decisions.

To the extent that political connections and lobbying efforts influenced the DOE loan program, this increases the potential harm to our capital markets and our economy. The large

---

<sup>73</sup> Letter, D. Hunt Ramsbottom, Rentech, President & CEO to Jonathan Silver, U.S. Dep't of Energy Loan Program Office, Executive Director (May 9, 2011).

<sup>74</sup> *Id.*

<sup>75</sup> Letter, David W. Kirkwood, Tenaska, Vice President & Treasurer, to Jonathan Silver, U.S. Dep't of Energy Loan Program Office, Executive Director (May 17, 2011).

<sup>76</sup> *Id.*

<sup>77</sup> Letter, David W. Kirkwood, Tenaska, Vice President & Treasurer, to Jonathan Silver, U.S. Dep't of Energy Loan Program Office, Executive Director (May 17, 2011).

number of troubling relationships between industry and government officials reflects an environment where fair impartial loan determinations did not occur, resulting in poor decisions.

For example, First Solar gained a unique advantage relative to its peers by mastering its relationship with government as we describe in Section III. Just six months after DOE provided First Solar three loan commitments totaling \$2.4 billion, the Committee learned that DOE's prized achievement under the First Solar scheme, First Solar's Mesa solar panel manufacturing plant, will delay its startup and cut jobs while cutting back global production by 60%. We also learned Abound Solar, a solar panel manufacturer that received a \$400 million DOE loan commitment, has since failed.

Following Solyndra, such a rapid pace of failure for solar projects, including the industry leader First Solar, leads us to expect many more solar projects will follow. As a result of these failures, we should also expect supply disruptions to solar generation projects, breaches of supply contracts, job loss, and dislocation to harm other taxpayer-backed solar firms. Based on these projections, it appears the DOE loan program, in the aggregate, will place a drag on the entire economy as investors in these firms and taxpayers face losses and bankruptcies.

#### **D. The "Independent" Review of the Loan Guarantee Program**

In October 2011, the White House ordered that an independent review be conducted by outside consultants in response to emerging problems, uncovered by the Solyndra scandal, with DOE's Loan Guarantee Programs.<sup>78</sup> The review, led by an "independent consultant," former Obama Administration Assistant Secretary of the Treasury, Herbert Allison, found serious systemic problems related to DOE management and issuance of loan guarantees.<sup>79</sup> Among the findings, Allison reported that DOE's loan program office suffers from structural weaknesses. The report finds:

- A lack of clarity in the lines of authority within the loan program office;
- A lack of balance between those with governmental experience and those with "substantial private sector experience and skill in project management and finance;"
- A lack of clear guidance regarding DOE's standard of "reasonable prospect of repayment;"
- A lack of clarity with regard to DOE's goals and tradeoffs with respect to financial goals versus policy goals; and
- The fees charged to companies to administer the program are not adequate to last through the duration of the loan guarantees.

While the institutional and managerial recommendations from the independent review are appropriate and helpful, the report falls short because it fails to consider whether political pressure played a role in the decision-making process at DOE. Additionally, the review does not

---

<sup>78</sup> THE WHITE HOUSE, REPORT OF THE INDEPENDENT CONSULTANT'S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE PORTFOLIO (Jan. 31, 2012), *available at* [http://www.whitehouse.gov/sites/default/files/docs/report\\_on\\_doe\\_loan\\_and\\_guarantee\\_portfolio.pdf](http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf)

<sup>79</sup> *Id.*

provide much insight into taxpayer risks – the independent review looks at “credit subsidy costs,” which represent the net present value of the expected lifetime cost to taxpayers of these loans. Credit subsidy costs, however, do not fully capture the risks to which taxpayers are subjected. According to the non-partisan Congressional Research Service, the independent review “did not calculate expected losses that may be realized by the project portfolio, and the report states that eventual losses cannot be predicted [using the accounting methods adopted by the review].”<sup>80</sup> In other words, unforeseen risks exist within DOE’s portfolio which may have future budgetary implications but are incalculable using governmental accounting methods.

Furthermore, it has been widely reported that the independent review found the cost to taxpayers of the loan programs to be lower than originally projected. This reading of the report neglects to explain how these calculations came about. The independent review evaluated 30 loans and loan guarantees, broken down into three categories created by the independent consultant: utility-linked loans and loan guarantees (“projects for the generation or transmission of alternative sources of energy”<sup>81</sup>); Non-utility-linked loans and loan guarantees (generally, projects that bear greater technological risk; Beacon Power and Solyndra would fall into this category); and Ford and Nissan loans (loans to these two companies were broken out because these “projects are more typical of traditional secured corporate loans”).<sup>82</sup>

When looked at in the aggregate, the costs of the program have, in fact, decreased since the DOE’s estimates at the time of origination.<sup>83</sup> However, this optimistic outlook is driven largely by the third category of loans and loan guarantees – those given to Ford and Nissan. The costs of the first two categories – utility-linked loans and non-utility-linked loans – increased by 14 percent and 71 percent, respectively, while the estimated cost of the Ford and Nissan loans *decreased* by 95 percent. The large drop in the cost of the loan to Ford and Nissan was largely driven by these two companies receiving credit ratings substantially greater than what DOE believed they merited at the time of DOE’s loan origination.<sup>84</sup> Looking just at utility-linked and non-utility-linked loans and loan guarantees, the expected cost to taxpayers has markedly increased. The Allison report glosses over this pertinent fact.

Lastly, the review excludes costs associated with Beacon Power and Solyndra when it calculated taxpayer liabilities. This is a significant omission, as Beacon Power had drawn down 91 percent of its loan guarantee at a cost to taxpayers of \$39 million, while Solyndra had drawn

---

<sup>80</sup> Phillip Brown, James Bickley, Bill Canis, “Consultant Review of DOE’s Loan and Loan Guarantee Portfolio: Summary and Analysis of Key Findings and Recommendations,” Congressional Research Service, Memorandum, March 8, 2012.

<sup>81</sup> THE WHITE HOUSE, REPORT OF THE INDEPENDENT CONSULTANT’S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE PORTFOLIO (Jan. 31, 2012), *available at* [http://www.whitehouse.gov/sites/default/files/docs/report\\_on\\_doe\\_loan\\_and\\_guarantee\\_portfolio.pdf](http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf)

<sup>82</sup> Phillip Brown, James Bickley, Bill Canis, “Consultant Review of DOE’s Loan and Loan Guarantee Portfolio: Summary and Analysis of Key Findings and Recommendations,” Congressional Research Service, Memorandum, March 8, 2012.

<sup>83</sup> THE WHITE HOUSE, REPORT OF THE INDEPENDENT CONSULTANT’S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE PORTFOLIO (Jan. 31, 2012), *available at* [http://www.whitehouse.gov/sites/default/files/docs/report\\_on\\_doe\\_loan\\_and\\_guarantee\\_portfolio.pdf](http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf)

<sup>84</sup> Phillip Brown, James Bickley, Bill Canis, “Consultant Review of DOE’s Loan and Loan Guarantee Portfolio: Summary and Analysis of Key Findings and Recommendations,” Congressional Research Service, Memorandum, March 8, 2012.

down 98 percent, or \$527 million. This is \$566 million in costs to taxpayers from the loan guarantee program that are completely ignored by the independent review.

### III. DOE Violated Statutory, Regulatory, and Prudential Requirements

The Committee investigation and analysis reveals that, among many other concerns, DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. In some cases it appears the bias may stem from DOE's susceptibility to effective lobbying efforts, conflicts of interest present in the Administration, or from its overriding policy preference for renewable technology.<sup>85</sup> The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration. .

#### A. DOE Repeatedly Violated Requirements Intended to Ensure Innovation and Manage Risk

##### 1. Regulatory Requirements

The Energy Policy Act specifies that the Secretary may *only* make loan guarantees under §1703 for projects that employ "new or significantly improved technologies."<sup>86</sup> DOE's implementing regulation defines this as an energy technology "that is not a Commercial Technology, and that has either (1) Only recently been developed, discovered, or learned; or (2) Involves or constitutes one or more meaningful and important improvements in productivity and value, in comparison to Commercial Technologies in use in the United States. . . ."<sup>87</sup> In applying this definition, it is important to bear in mind the congressional intent underlying title XVII: to incentivize *innovative* technologies.<sup>88</sup>

The Loan Program Office's (LPO) first solicitation, issued on July 29, 2009, targeted innovative projects that satisfied the statutory and regulatory requirements of §1703.<sup>89</sup> Projects approved under this solicitation could access 100% financing through the Federal Financing Bank.

The LPO's second solicitation, issued on October 7, 2009, created the Financial Institution Partnership Program (FIPP) under § 1705.<sup>90</sup> This loan guarantee solicitation was

---

<sup>85</sup> An example of evidence indicating a strong ideology: Jonathan Silver, the former Director of the Loan Program Office (LPO) stated in an email to Matthew Winters dated June 9, 2011, in relation to a Treasury review of First Solar cost estimates, "Well done. Sorry you have to deal with all this. Hope the real story of how those folks tried to kill deals that would have moved the needle and created jobs because of a slavish attachment to a flawed and limited world view comes out."

<sup>86</sup> 42 U.S.C. § 16513(a)(2).

<sup>87</sup> 10 C.F.R. § 609.2 (2011).

<sup>88</sup> Energy Policy Act of 2005, Pub. L. 109-58, title XVII, 119 Stat. 1117 (2005).

<sup>89</sup> Innovative Solicitation, *supra* note 14.

<sup>90</sup> FIPP Solicitation, *supra* note 23.

open to *non-innovative* (i.e., already commercialized) projects, but the project sponsor had to secure the loan itself from a private lender. This structure reflects a reasonable and prudent application of the Department's loan guarantee authority: a project that employs commercialized technology would only need a federal loan guarantee if it was an inherently high-risk venture. The Department prudently sought to mitigate this risk by requiring that it be shared with a private financial institution.

A second requirement in the Code of Federal Regulations only allows for "one technology per project sponsor."<sup>91</sup> Section 609.3(a) states that a Project Sponsor or Applicant may only submit one Pre-Application or Application for one project using a particular technology. The rule prohibits an Applicant from submitting a Pre-Application or Application for multiple projects using the same technology. This common-sense requirement mitigates the risk to taxpayer dollars by ensuring diversity, while increasing the potential for innovation within the Department's loan guarantee portfolio.

Nonetheless, in issuing these loans, DOE disregarded these constraints, often with the explicit encouragement of department officials. Substantial evidence indicates that, in two cases, officials in the Loan Programs Office deliberately mischaracterized substantively identical technologies as dissimilar.<sup>92</sup> In other cases, DOE labeled a technology as "innovative" when it clearly should have been classified as a "proven technology" merely because the particular model had not been sold in the United States.<sup>93</sup> Additionally, there is evidence that applicants, with the encouragement of department officials, intentionally mischaracterized their projects as "innovative" in an effort to access the Federal Financing Bank and defeat these prudential requirements.

## **2. The First Solar Scheme**

### *a. Overview*

First Solar manufactures thin film cadmium telluride solar panels and also provides prefabricated solar plants, where buyers can purchase a ready to run solar generation facility that uses First Solar's cadmium telluride panels.<sup>94</sup> First Solar sought to create four turnkey projects with the assistance of DOE loan guarantees and direct loans. Contrary to the law governing DOE loans, these four projects relied on virtually identical solar technology. Accordingly, First Solar's use of the same technology across the four projects resulted in potential violations of federal regulations and the underlying loan solicitations. Specifically, through DOE's funding of three First Solar projects, DOE and First Solar may have violated regulations imposing the innovativeness requirement<sup>95</sup> and violated the regulation that allows only one technology per project sponsor.<sup>96</sup>

---

<sup>91</sup> 10 C.F.R. § 609.3(a) (2011).

<sup>92</sup> See discussion *infra* Part III.A.2.

<sup>93</sup> See discussion *infra* Part III.A.2.e.

<sup>94</sup> See First Solar, Product and Services, *available at* <http://www.firstsolar.com/Products-and-Services/Products>

<sup>95</sup> The Energy Policy Act specifies that the Secretary may *only* make loan guarantees under §1703 for projects that employ "new or significantly improved technologies." 42 U.S.C. § 16513(a)(2). DOE's implementing regulation defines this as an energy technology "that is not a Commercial Technology, and that has either (1) Only recently been developed, discovered, or learned; or (2) Involves or constitutes one or more meaningful and important

First Solar submitted applications for two of the projects, Topaz and Desert Sunlight, under the DOE's FIPP solicitation that allowed for non-innovative projects. The other two projects, Agua Caliente and Antelope Valley Solar Ranch, sought and succeeded in gaining an advanced position in the application process by purchasing existing projects from Nextlight Renewable Power ("Nextlight") that previously filed applications with DOE. However, the projects purchased from Nextlight had applied under the DOE's "innovative" solicitation.

First Solar always intended to use the same technology across all four projects. However, given the innovativeness requirement that applied to Agua Caliente and Antelope Valley Solar Ranch, as a result of Nextlight's original applications, these projects still needed to be deemed innovative. Additionally, the two projects needed to comply with the one technology per project sponsor requirement. This latter requirement meant that the two "innovative" projects also needed to be differentiated from each other to qualify.

First Solar's Agua Caliente and Antelope Valley Solar Ranch received funding despite the fact that each project may have violated the regulations described above. In the next section, we describe these violations in greater detail, provide the motives of DOE and the Administration, and offer documentation indicating DOE manufactured evidence of compliance with these rules while internally conceding their failure to adhere to the law.

*b. The Manufacturing Plant that Motivated Action on All Four First Solar Projects*

While DOE publicly talked about the merits of each First Solar project individually, internal DOE emails indicate that DOE favored First Solar projects and viewed them collectively because DOE sought to enable First Solar to build a new manufacturing plant in Arizona.<sup>97</sup> The logic was simple: four solar generation projects would provide sufficient demand to justify and support locating a new First Solar manufacturing plant in Arizona.<sup>98</sup>

The White House planned to use this new manufacturing plant and the jobs that it supported as evidence of the indirect benefits of DOE loan guarantees for the economy. Documents and e-mails obtained by the Committee offer unique insight on how decisions were made. In an e-mail from Jonathan Silver, Executive Director of the Loan Programs Office at DOE, to Deputy Energy Secretary Daniel Poneman in May of 2011 demonstrates DOE's plan to group the First Solar deals as a package. Silver wrote that "First [S]olar deals need to be considered as a package since they support the building of a manufacturing plant to service their collective needs."<sup>99</sup> The White House supported this packaging idea. In an email to other DOE officials from June 2011, Matthew Winters, Senior Advisor for Loan Programs at DOE, wrote:

We have often talked about how the 3 FSLR [First Solar] projects were are (sic) considering will support the building of a manufacturing facility in Arizona. Can

---

improvements in productivity and value, in comparison to Commercial Technologies in use in the United States..." See 10 C.F.R. § 609.2 (2011).

<sup>96</sup> Section 609.3(a) states "[a] Project Sponsor or Applicant may only submit one Pre-Application or Application for one project using a particular technology. The rule prohibits an Applicant from submitting a Pre-Application or Application for multiple projects using the same technology. See 10 C.F.R. § 609.3(a) (2011).

<sup>97</sup> Email from Jonathan Silver, DOE, May 31, 2011 (on file with author)

<sup>98</sup> *Id.*

<sup>99</sup> *Id.*

one you (sic) please quickly draft a 1-2 sentence blurb that states exactly how this is the case, and give the location, size, and expected construction date of the mfg facility? *This will go into a document for the White House that describes the manufacturing impact of the projects in our pipeline.*<sup>100</sup> (emphasis added)

*c. The Collective Application of First Solar*

The DOE's treatment of the First Solar applications during the credit review process demonstrates the Department realized the projects all employed the same non-innovative technology. DOE considered packaging three First Solar projects as one vote in front of the DOE credit review board (the Antelope Valley, Topaz, and Desert Sunlight projects), despite the projects coming from different solicitations (innovative versus commercial). Margot Anderson, a Senior Advisor at DOE, wrote an email on June 25, 2011, before the DOE credit review board voted to grant conditional guarantees to three First Solar projects (Antelope Valley, Topaz, and Desert Sunlight), asking "[S]hould it be three separate votes or one vote for all three projects?"<sup>101</sup> While the credit review board appears to have voted separately for all three projects, this conversation reinforces the mindset within DOE that all First Solar projects represented a package and not individual projects.

Despite ultimately approving credit individually for each project, the next email shows the extent to which DOE wanted "all of the deals to look exactly alike":

Our question is simply "is there an issue if we bring all of the First solar projects including the various IEs (Luminate and Burns and Roe) into the same room to discuss the terms of the deals?" Essentially, we want all of the deals to look exactly alike. First Solar has suggested the meeting so they are on board the IEs are OK with it but one brought up the [Non-Disclosure Agreement] issue and I want to get that resolved. Jonathan want[s] the meeting to happen this week or early next, to get these projects going.<sup>102</sup>

With this plan to package the First Solar deals, DOE granted conditional loan guarantees to four First Solar projects that used First Solar's cadmium telluride photovoltaic solar panels.<sup>103</sup> DOE describes this technology as "commercially proven" and "deployed since 2001."<sup>104</sup> Yet, DOE was classified two of First Solar's projects as innovative and ignored the "one sponsor per technology per solicitation."<sup>105</sup>

---

<sup>100</sup> Email from Matthew Winters, DOE, June 14, 2011. (Emphasis added).

<sup>101</sup> Email from Margot Anderson, DOE, June 25, 2011.

<sup>102</sup> Email from Jeffrey Walker, DOE, to Susan Richardson and Kimberly Heimert, DOE, Subject "Bridge [Non Disclosure Agreements] for this unusual circumstances," (March 29, 2011, 8:21 AM).

<sup>103</sup> DOE did not finalize First Solar's Topaz project and only gave final approval to three First Solar projects. Upon finalization of its DOE loan guarantees, First Solar sold all of its development projects to large utilities, such as Exelon and NextEra.

<sup>104</sup> "Energy Department Finalizes Loan Guarantee to Support California Solar Generation Project," U.S. Department of Energy, September 30, 2011. Available at: <https://lpo.energy.gov/?p=5324>.

<sup>105</sup> This scheme coincidentally improved the financing terms of the programs by enabling the government to provide a 100% direct loan as opposed to an 80% loan guarantee. Specifically, those entities approved under the innovative path received direct federal loans from the Federal Financing Bank (FFB) for 100% of the sought after amount. Had these entities gone through the commercial path, they would need to borrow from a private lender who would then

*d. First Solar's Acquisition of NextLight's Projects to Enable All Four Projects to Proceed Together*

To understand why DOE manipulated the First Solar applications one must understand how these projects came to pass. First Solar purchased NextLight Renewable Power in a deal that included NextLight's two pending DOE loan guarantee projects—Agua Caliente and Antelope Valley Solar Ranch—in April of 2010.<sup>106</sup> DOE had invited both NextLight projects into the due diligence level in the loan application process,<sup>107</sup> indicating that both continued to progress successfully towards ultimate approval. NextLight had applied for innovative loan guarantees for both projects. Under Nextlight's applications, the Agua Caliente project would use amorphous silicon technology, and the Antelope Valley project would use crystalline silicon solar technology.<sup>108</sup>

When First Solar purchased NextLight, it planned to switch to its own proven – and non-innovative - technology relying on cadmium telluride panels for both projects. However, First Solar wanted to keep both projects in the innovative technology queue. First Solar faced two challenges to keep both projects in the innovative queue. First, the company had to prove that both projects used innovative technology; while using First Solar cadmium telluride panels for the projects that would not qualify as innovative. Second, First Solar had to ensure that both projects used different “innovative” technologies, otherwise the projects would violate the DOE rule that one company could only sponsor one project using a specific innovative technology under the innovative technology solicitation.

*e. Failure to Prove Innovativeness; Resorting to Falsification*

First Solar planned to qualify both projects for the innovative solicitation by incorporating relatively minor new technologies into the solar plants. The Agua Caliente project would use standard First Solar cadmium telluride panels, but would use an inverter “fault ride-through and dynamic voltage regulation” technology<sup>109</sup> that would help the plant stay operational even if the sun did not shine constantly on a particular day.<sup>110</sup> First Solar relied on this inverter

---

receive at most an 80% guarantee. Therefore, the non-innovative entities benefitted from the false “innovative” designation in that they received fully guaranteed funding, as opposed to partially guaranteed, reducing their cost of borrowing. The other two First Solar projects received partial loan guarantees as part of the Financial Institution Partnership Program.

<sup>106</sup> Dealbook, *First Solar Buys NextLight for \$285 Million*, N.Y. TIMES, April 29, 2010 available at <http://dealbook.nytimes.com/2010/04/29/first-solar-buys-nextlight-for-285-million/>.

<sup>107</sup> Email from Daniel Tobin, Director of Loan Programs Intake Division and Senior Investment Officer, U.S. Dep't of Energy (July 23, 2010).

<sup>108</sup> Internal Memo from Dong Kim, Chief Engineer of the Technical and Project Management Division, U.S. Dep't of Energy, to David Frantz, Director of Loan Guarantee Program Office, U.S. Dep't of Energy (July 25, 2010).

<sup>109</sup> Press Release, U.S. Dep't of Energy, Department of Energy Finalizes a \$967 Million Loan Guarantee to Support the Agua Caliente Solar Project (Aug. 5, 2011) available at <http://energy.gov/articles/departments-energy-finalizes-967-million-loan-guarantee-support-agua-caliente-solar-project>.

<sup>110</sup> U.S. Dep't of Energy, Internal Memo, “Next Light Antelope Valley Technical Eligibility Re-Evaluation” (July 21, 2010); *See also* email from Cathy Grover, Luminate, to Robin L Sampson, U.S. Dep't of Energy (Mar. 30, 201, 1 3:39 PM EST), which stated, “The Project's inverter that we show currently specified is an SMA 630CP ... From a design perspective, switching to the 720CP (from the 630CP, if this is in fact what First Solar is doing), has no real impact on the electric energy production values.”



to qualify the Agua Caliente project as innovative.<sup>111</sup> However, the innovativeness of this inverter technology is highly questionable based on the following issues identified through the review of email communications and internal DOE reports.

An email between DOE staff describes the lack of innovativeness of this inverter technology, stating, “The Project’s inverter that we show currently specified is an SMA 630CP ... From a design perspective, switching to the 720CP (from the 630CP, if this is in fact what First Solar is doing), has no real impact on the electric energy production values.”<sup>112</sup> A DOE whitepaper reveals that more than 200 of these allegedly “innovative” inverters had been in use in Germany, Italy and Spain since September 2010.<sup>113</sup> While, according to the rule, foreign commercial use of a technology is not a bar to deeming domestic use innovative, the broad commercial use in Europe reflects the disrespect DOE applies to the actual innovativeness requirement.

Directly calling into question any determination that this technology is innovative, the DOE whitepaper provides that these inverters are “commercially ship[ped] today in the United States as well.”<sup>114</sup> The report explains that “the technology being implemented is not new as compared to traditional turbine-based generators” and is commercially manufactured in Colorado.<sup>115</sup> These facts emailed among DOE staff undermine any determination of innovativeness and clearly indicate that Agua Caliente failed to satisfy the requirements designed to spur development of new technologies.<sup>116</sup>

First Solar also planned to use this inverter technology to make the Antelope Valley project innovative; however, even if the technology were innovative with regard to Agua Caliente, its second application to Antelope Valley would violate the one technology per project sponsor requirement.<sup>117</sup> To overcome this obstacle, First Solar added a “single axis tracking” system for the Antelope Valley project to differentiate it.<sup>118</sup> This system simply allowed the panels to track the sun – a technology that has been around for decades. Additionally, First Solar

---

<sup>111</sup> See “NEXT LIGHT ANTELOPE VALLEY TECHNICAL ELIGIBILITY RE-EVALUATION” attachment (July 21, 2010) to email from Sarah Hetznecker, U.S. Dep’t of Energy, to Patrick Gorman, U.S. Dep’t of Energy, Subject: “here is the antelope valley re-evaluation memo” (July 22, 2010 9:06 AM).

The Antelope Valley Project will use the new Fault Ride-Through Technology inverters that are being used in the Agua Caliente Project and were the basis for new and significantly improved technologies as compared to commercial technologies’ for that project. While this is being used on both of these projects, it will meet the definition of “new of [sic] Singificantly Improved Technology and it is not a Commercial Technology, because it is not being used in three or more commercial projects in the US in the same general application and it has not been in operation for 5 years. In addition, First Solar will use single axis tracking on 50 MW of the 230 MW for the Antelope Valley Project. Based up on the re-evaluation, we conclude that the project will meet the eligibility criteria

<sup>112</sup> Email from Cathy Grover, Luminate, to Robin Sampson, U.S. Dep’t of Energy (March 30, 2011, 3:39 PM).

<sup>113</sup> “Antelope Valley Solar Ranch 1 Project: Inverter Implementation Whitepaper” (May 18, 2011) (Email from Sarah Hetznecker to Jeffrey Walker (May 22, 2011, 12:14:03 PM)).

<sup>114</sup> *Id.*

<sup>115</sup> *Id.*

<sup>116</sup> See *supra* note 87.

<sup>117</sup> See *supra* note 91.

<sup>118</sup> Dong Kim, U.S. Dep’t of Energy Memo, “First Solar (Next Light) Antelope Valley Solar Ranch One Technical Eligibility Re-Evaluation”(Aug. 4, 2010).

only planned to install this system on 50 MW of the plant's 230 MW capabilities, less than 25% of the plant.<sup>119</sup>

Rather than force First Solar's Antelope Valley project to step out of the innovation queue, DOE quickly created a memo that allegedly justified the project remaining "innovative." The memo claimed that the Antelope Valley project would use three different innovative technologies: Fault Ride-Through Technology, Dynamic Voltage Regulation, and single axis tracking.<sup>120</sup> Internal DOE emails reveal a rushed process that left certain DOE officials questioning the validity of the analysis.<sup>121</sup> DOE officials also heavily edited the memo to deemphasize First Solar's other pending projects and the fact that the Antelope Valley project used the same "innovative" technology as the Agua Caliente project.<sup>122</sup>

More importantly, on June 23, 2011, Dong Kim, Director of the Technical and Project Management Division, (who had edited the DOE memo on Antelope Valley's innovativeness referenced above) wrote an email indicating that the allegedly innovative tracking technology did not constitute innovativeness, was not considered innovative originally, and also pointed out that others continuously revised documents to incorrectly reflect that the trackers were "innovative." Kim wrote:

**Someone keeps changing [Antelope Valley Solar Ranch] Technical slides to include single axis trackers as an innovation. Be clear that this not an innovation. The record will show that we did not grade this as innovative during intake review.** It will not stand up to scrutiny if compared with CVSR [California Valley Solar Ranch] trackers. Whoever continues to make this change needs to understand that Technical does not support the 20 percent of the CVSR field with trackers as an innovative component.<sup>123</sup> (emphasis added)

The apparent cover-up that led to Kim's stern email indicates that DOE staff sought to maintain a false finding of "innovative" for the single axis trackers.

DOE's August 4, 2010, memo claimed that the Antelope Valley project used three innovative technologies. However, DOE's Director of the Technical and Project Management Division revealed that the single axis trackers did not qualify as innovative and DOE's own press release demonstrated that the Agua Caliente project already used both the fault ride-through and the dynamic voltage regulation technologies.<sup>124</sup> Since Agua Caliente had already received a loan guarantee using this "innovative" technology, Antelope Valley was barred from relying on the same technology for its innovativeness-based application. As a result, Antelope Valley provided

---

<sup>119</sup> *Id.*

<sup>120</sup> *Id.*

<sup>121</sup> Email from Susan Grodin, U.S. Dep't of Energy (Aug. 3, 2010) (stating that "this memo was cobbled together from different sources and in so doing, an obvious piece was left out").

<sup>122</sup> Dong Kim, U.S. Dep't of Energy, Technical memo (July 25, 2010) (discussing that DOE's tracked changes on the memo reveal that DOE removed references to First Solar's Desert Sun and Topaz projects from the second paragraph and removed an entire paragraph discussing how the Antelope Valley project and the Agua Caliente project use the same Fault Ride Through Technology).

<sup>123</sup> Email from Dong Kim, U.S. Dep't of Energy (June 23, 2011).

<sup>124</sup> Press Release, U.S. Dep't of Energy, Department of Energy Finalizes a \$967 Million Loan Guarantee to Support the Agua Caliente Solar Project (Aug. 5, 2011) available at <http://energy.gov/articles/departments-energy-finalizes-967-million-loan-guarantee-support-agua-caliente-solar-project>.

no innovative technology that would justify its eligibility for a DOE loan. DOE should have deemed First Solar's Antelope Valley project ineligible under the innovativeness solicitation.

*f. Persistent Pressure to Approve the First Solar Projects and Achieve the Master Plan of Building a Manufacturing Facility*

First Solar kept pressure on DOE to approve the three projects in the final weeks leading up to DOE's issuance of conditional loan guarantees. On May 18, 2011, Jens Meyerhoff, an executive at First Solar, wrote a letter to Jonathan Silver implicitly threatening that First Solar might not commit to completing construction on the Arizona manufacturing plant if DOE did not approve all three First Solar loan guarantees. Meyerhoff wrote:

A failure to receive DOE and U.S. government agency approvals for these projects or missing the September 30 statutory deadline under the 1705 program would seriously jeopardize the financing for the Agua Caliente, Antelope Valley Solar Ranch, Desert Sunlight and Topaz projects. As you know, a major reason for choosing to build the manufacturing plant in Mesa, AZ was to provide solar modules to these large and important U.S. projects.

We will invest more than \$300 million in the factory, put people in Mesa to work at a long-dormant industrial site that once was home to an automotive testing facility, and create high tech green jobs that did not exist before...

...First Solar consciously made the decision to build a new U.S. manufacturing center to support and recycle economic benefits created by favorable U.S. political support for renewable energy, including the 1703 and 1705 DOE loan guarantee programs.

The DOE loan programs provide an important financing 'bridge' at a time when the U.S. private debt markets have little or no experience financing first-of-their-kind utility-scale solar projects, and the capital markets remain constrained in the wake of the global financial crisis. If First Solar's project applications are not approved, or if they're delayed beyond September 30, we believe it could jeopardize our ability to close financing (both debt and equity), jeopardize construction of 1,620 megawatts of solar capacity and, **frankly, undermine the rationale for a new manufacturing center in Arizona.**<sup>125</sup>

First Solar also tried more friendly persuasion. Nikolas Novograd, Vice President at First Solar, sent Bill Pegues at DOE a picture of the construction taking place at First Solar's Arizona plant. Pegues planned to use the construction picture to help persuade members of the credit review board to vote for the First Solar projects. He forwarded the picture to several DOE officials, commenting, "[H]ere's a photo of the construction

---

<sup>125</sup> Letter from Jens Meyerhoff, First Solar, to Jonathan Silver, Director of Loan Programs Office, U.S. Dep't of Energy (May 18, 2011) (*emphasis added*).

progress on the FSLR mfg plant in Mesa, Arizona as of Tuesday 6/14. I'll bring several copies to CRB [Credit Review Board] just in case we need them.”<sup>126</sup> Additionally, Rob Gillette, CEO of First Solar, arranged a phone call with the Deputy Energy Secretary on June 24, 2011, only days before the Credit Review Board met to decide whether to grant conditional loan guarantees to the three First Solar projects.<sup>127</sup>

By June 22, 2011, several days before the Credit Review Board approved conditional loan guarantees for the projects, Secretary Chu's office had already planned a press release to announce the conditional loan guarantees for the First Solar projects that relied upon job creation numbers from First Solar itself.<sup>128</sup> Secretary Chu's office carefully coordinated the media strategy for the approval of the conditional loan guarantees for the three First Solar projects. Sonia Taylor at DOE wrote in an email on June 28, 2011, that

S1's office hopes to offer an advanced story to a national reporter on all three First Solar deals later today, with a story to run tomorrow along with the press release...

...If you haven't already, can you all please notify the appropriate people from First Solar and the other companies that the deal is official? I have been working with First Solar (**under the guise of 'should the deal be approved'**), and they do not plan on writing a press release. Can you all please see whether the banks plan on issuing a release? If so, we'll need to review it.<sup>129</sup> (emphasis added)

On June 30, 2011, DOE issued a press release that announced the conditional loan guarantees for the three First Solar projects for around \$4.5 billion.<sup>130</sup> The six paragraph announcement only mentioned First Solar once and described the Antelope Valley project as featuring “a utility-scale deployment of innovative inverters with voltage regulation and monitoring technologies that are new to the U.S. market.”<sup>131</sup> The press release did not mention the trackers on the Antelope Valley project.

DOE would eventually issue final loan guarantee offers to First Solar's Antelope Valley and Desert Sunlight projects on the final day of the 1705 loan guarantee program (September 30, 2011).<sup>132</sup> Despite the issues surrounding the innovative nature of the Antelope Valley project, DOE finalized a 100% loan guarantee worth \$646 million for the allegedly “innovative” project. Ultimately, DOE did not finalize First Solar's Topaz

---

<sup>126</sup> Email from Bill Pegues, U.S. Dep't of Energy (June 23, 2011).

<sup>127</sup> Email from Elizabeth Emanuel, U.S. Dep't of Energy (June 24, 2011).

<sup>128</sup> Email from William Pegues, U.S. Dep't of Energy (June 22, 2011).

<sup>129</sup> Email from Sonia Taylor, U.S. Dep't of Energy (June 28, 2011).

<sup>130</sup> Press Release, U.S. Department of Energy, DOE Offers Conditional Loan Guarantee to Support Nearly \$4.5 Billion in Loans for Three California Photovoltaic Solar Power Plants (June 30, 2011) *available at* <https://lpo.energy.gov/?p=4873>.

<sup>131</sup> *Id.*

<sup>132</sup> DOE did not finalize First Solar's Topaz loan guarantee project.

project, but a subsidiary company of Warren Buffett's Berkshire Hathaway purchased the project from First Solar.<sup>133</sup>

*g. First Solar's Financial Problems since the Loan Guarantees*

Since DOE finalized First Solar's three loan guarantees (for over \$3 billion), First Solar has encountered serious financial problems that put the DOE funded projects in jeopardy. First Solar's stock declined the greatest compared to of any S&P 500 companies in 2011 and has lost over \$100 per share over the past year.<sup>134</sup> First Solar has cut production of its solar panels worldwide.<sup>135</sup> Based upon the company's financial troubles, First Solar fired its CEO in October.<sup>136</sup> Additionally, in March 2012, the Securities and Exchange Commission announced an investigation into whether First Solar had improperly disclosed information about whether the First Solar Topaz project would receive a loan guarantee from DOE.<sup>137</sup>

More recently, First Solar has revealed problems that directly impact its three DOE loan guarantee projects. First Solar's Antelope Valley project had problems getting a permit and has yet to receive any DOE funding.<sup>138</sup> First Solar announced in late February that it would postpone manufacturing solar panels at its Mesa Arizona plant, which is still under construction, because of financial problems.<sup>139</sup> First Solar intended for the Mesa facility to provide panels to the four First Solar projects. This delay means that the indirect jobs that the White House wanted to create with the three loan guarantees will likely never materialize, and raises questions about whether First Solar will have problems supplying solar panels to its DOE loan guarantee projects. Additionally, First Solar has revealed that it has needed to replace millions of dollars worth of its solar panels under warranty because they did not last in hot climates.<sup>140</sup> Considering all three of First Solar's DOE-based solar generation projects are located in hot desert climates, this issue raises serious concerns about whether the panels will work properly long term.

*h. Conclusion*

There appears to be a significant amount of evidence, based on documents received by the Committee and supplied by DOE and others, indicating that DOE manipulated its analysis and strategically modified evaluations in order to issue loans to First Solar that would qualify

<sup>133</sup> Todd White and Marc Roca, *Berkshire Buys \$2 Billion Power Projects as Buffett Wagers on Solar Energy*, BLOOMBERG, December 7, 2011 available at <http://www.bloomberg.com/news/2011-12-07/berkshire-s-midamerican-energy-to-buy-topaz-solar-farm.html>.

<sup>134</sup> "First Solar (FSLR) Worst Stock in S&P 500 This Year," StreetInsider, December 30, 2011 available at [http://www.streetinsider.com/Insiders+Blog/First+Solar+\(FSLR\)+Worst+Stock+in+S%26P+500+This+Year/7046826.html](http://www.streetinsider.com/Insiders+Blog/First+Solar+(FSLR)+Worst+Stock+in+S%26P+500+This+Year/7046826.html).

<sup>135</sup> Patrick O'Grady, *First Solar delays Mesa production plant*, PHOENIX BUS. J., February 29, 2012 available at [http://www.bizjournals.com/phoenix/morning\\_call/2012/02/first-solar-delay-mesa-production-plant.html](http://www.bizjournals.com/phoenix/morning_call/2012/02/first-solar-delay-mesa-production-plant.html).

<sup>136</sup> *First Solar Ousts CEO, Shares Dive 24 Percent*, REUTERS, October 25, 2011 available at [http://www.cnbc.com/id/45035458/First\\_Solar\\_Ousts\\_CEO\\_Shares\\_Dive\\_24\\_Percent](http://www.cnbc.com/id/45035458/First_Solar_Ousts_CEO_Shares_Dive_24_Percent).

<sup>137</sup> Patrick O'Grady, *SEC investigating First Solar*, PHOENIX BUS. J., March 4, 2012 available at [http://www.bizjournals.com/phoenix/morning\\_call/2012/03/sec-investigating-first-sola.html](http://www.bizjournals.com/phoenix/morning_call/2012/03/sec-investigating-first-sola.html).

<sup>138</sup> Yuliya Chernova and Cassandra Sweet, *California Solar Deal Hits a Snag*, WALL ST. J., February 11, 2012 available at <http://online.wsj.com/article/SB10001424052970203646004577214973345400202.html>.

<sup>139</sup> O'Grady, *supra* note 132.

<sup>140</sup> Ryan Randazzo, "First Solar replacing more solar panels," The Arizona Republic, March 1, 2012 available at <http://www.azcentral.com/arizonarepublic/business/articles/2012/03/01/20120301first-solar-replacing-more-solar-panels.html>.

under the statutory guidelines. This is cause for serious concern. An application that should otherwise fail, but instead passes under improper influence and through the manipulation of analysis, results in the defrauding of taxpayers and misappropriation of assets.<sup>141</sup> Furthermore, any advantage to an applicant disadvantages other applicants and improperly diverts DOE resources.

## **B. DOE Violated the Statutory Requirement that Projects Commence Construction by September 30, 2011**

The Recovery Act states that the Secretary may only make loan guarantees under § 1705 for projects “that commence construction not later than September 30, 2011.”<sup>142</sup> This provision is designed to effectuate the *rapid* deployment of renewable energy projects. Furthermore, § 3(b) of the Act mandates that the Secretary expend appropriated funds “as quickly as possible consistent with prudent management,” so as to achieve the Act’s stated goal of economic stimulus.<sup>143</sup> This “shovel-ready” requirement also helps to mitigate risks associated with too many unknown variables.

The DOE knowingly violated this explicit statutory mandate. The Department’s FIPP loan guarantee solicitation from October 7, 2009, defined “commence construction on before September 30, 2011” to mean that

(i) the Borrower has completed all pre-construction engineering and design, has received all necessary licenses, permits and local and national environmental clearances, has engaged all contractors and ordered all essential equipment and supplies as, in each case, can reasonably be considered necessary so that physical construction of the Eligible Project may begin (or, if previously interrupted or suspended, resume) and proceed to completion without foreseeable interruption of material duration and (ii) such physical construction (including, at a minimum, excavation for foundations or the installation or erection of improvements) at the primary site of the Eligible Project has begun (or resumed).

On September 30, 2011 – the last day of the program – the Secretary approved a \$1.4 billion loan guarantee for Project AMP. Project AMP intends to install solar panels on the rooftops of many of ProLogis’ extensive real estate holdings. However, as the September 2011 application approval deadline approached, Project AMP was nowhere near prepared to commence construction, in part because it failed to secure contractual commitments to purchase energy from its proposed solar generation facilities.<sup>144</sup> Construction cannot begin for any phase of Project AMP until parties agree to a Power Purchase Agreement (PPA), which helps to ensure sufficient revenue to justify an installation of solar panels. As of March 6, 2012, Project AMP

<sup>141</sup> See discussion *infra* Part V.A. and V.B.

<sup>142</sup> 42 U.S.C. § 16516(a).

<sup>143</sup> American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, §3(a), 123 Stat. 115 (2009).

<sup>144</sup> Email from Eric Mogilnicki, WilmerHale, counsel to Bank of America, the lead lender for Project AMP (Mar. 6, 2012) (on file with author).

had not signed any PPAs, had not purchased any solar panels, and had not begun construction at any locations.<sup>145</sup>

Consistent with Project AMP's lack of preparedness to commence construction, Fitch Ratings imposed a "framework" methodology to rate the credit risk of Project AMP.<sup>146</sup> Fitch explained that, due to a lack of negotiated prices, a lack of known product suppliers, and a lack of PPAs, Fitch could not model cash flows or consider the credit quality of the businesses the project would transact with.<sup>147</sup> For this reason, Fitch mandated the use of a framework approach that imposed minimum credit quality requirements and other controls to ensure adequate credit quality relating to future transactions.<sup>148</sup> Fitch also required that Project AMP return to Fitch to receive ratings for each phase prior to seeking DOE loan disbursements consistent with the framework approach.<sup>149</sup> As of March 6, 2012, Project AMP had not sought ratings for any phase of Project AMP.<sup>150</sup> This further clarifies the extent of Project AMP's failure to commence construction.

While the credit rating methodology appears appropriate given the circumstance, the need to apply this approach reflects Project AMP's failure to meet the specific requirements of the law. Nonetheless, DOE approved Project AMP's loan guarantee for \$1.4 billion dollars. DOE approval of this project on the final day with pressure from Secretary Chu reflects improper influence and recklessness that led to an extremely large and inappropriate loan commitment.<sup>151</sup>

As we describe in Section D below, following DOE's approval of Project AMP, natural gas prices fell dramatically, resulting in substantially lower power prices in areas where natural gas generation provides the marginal supply of power. Lower market prices for power reduce potential revenue for all PPAs – in other words, solar power directly competes against natural gas fired generation. Had Project AMP locked in PPAs at the time DOE approved its loan, this loss of potential revenue would have been avoided. Given the lag between approval and PPA negotiation, price risk materialized, likely reducing the aggregate value of Project AMP as a direct consequence of Secretary Chu's inappropriate approval.

Had DOE rejected Project AMP due to its failure to commence construction, the government and participants in the project would have avoided misallocating capital to a project that was premature.

### **C. DOE Violated the Statutory Requirement of "Superiority," Illegally Benefiting Banks at the Expense of Taxpayers**

When it created the loan guarantee program, Congress took several steps to protect taxpayer funds and limit the DOE's risk exposure. These restrictions are recited in § 1702 of the

---

<sup>145</sup> *Id.*

<sup>146</sup> See Fitch Ratings, "Credit Rating for ProSun Project Company, LLC. - Project AMP" (August 21, 2011).

<sup>147</sup> See *id.* for additional detail on ratings approach provided through discussions with Fitch Ratings staff responsible for Project AMP ratings and Bank of America staff involved with Project AMP.

<sup>148</sup> *Id.*

<sup>149</sup> *Id.*

<sup>150</sup> Mogilnicki, *supra* note 144.

<sup>151</sup> See Ryan Tracy and Cassandra Sweet, *Emails Show Chu's Loan-Deal Role*, WALL ST. J., Feb. 18, 2012 available at <http://online.wsj.com/article/SB10001424052970204059804577229661338221828.html>.



Energy Policy Act and by statute apply to *all* loan guarantees issued under title XVII.<sup>152</sup> One of the most important risk-limiting provisions requires the Secretary to secure a superior claim to any assets in the event of a default.<sup>153</sup> The statute unequivocally requires that these rights must be “superior to the rights of any other person.”<sup>154</sup> This common-sense rule ensures that if the U.S. government is on the hook to pay off creditors, it should be able recover at least some of its losses.

This right to superiority over collateral is appropriate given that taxpayers enabled the transaction through provision of a subsidy. Given the substantial risk associated with DOE loan guarantees and the lack of any potential for the taxpayer to profit, the law required that the DOE at least maintain a superior position with respect to collateral to protect taxpayers in the event that a project failed. Private banks stand to profit if a project succeeds, while also avoiding substantial downside risk if a project fails. Given these clear benefits to lenders, Congress determined that lenders should not also gain parity with the DOE on the rights of collateral and inserted the “superiority” provision to prevent weakening the taxpayer’s position.

In what can only be considered a preemptive bailout for banks, DOE eliminated taxpayer protections by agreeing to share its rights in the collateral of failed projects with private lenders. Notwithstanding the clarity of the statutory requirement and the policy basis for it, the DOE enacted regulations that allowed banks to gain parity with the United States with regard to collateral.<sup>155</sup> While this may have increased its lending authority, it did so by weakening the taxpayer’s protections.

A review of the seven Financial Institution Partnership Program based loan guarantees reveals that DOE agreed to share its collateral rights with the lenders for all FIPP loans issued after enactment of the DOE regulations.<sup>156</sup> Instead of selectively sharing collateral for the safest projects, DOE instead applied this approach to all FIPP loans, irrespective of the highly varying deal terms, credit quality and loan amounts.<sup>157</sup> In no case did DOE withhold this benefit from banks to protect taxpayers. In effect, DOE behaved as if its new interpretation of the law *mandated* that banks be placed on par with taxpayers.

## **1. Superiority of Rights vs. *Pari Passu* Sharing**

In the event of a default, a loan guarantee provides assurances to banks and other lenders that they will recover 80% of the money loaned to the renewable energy project.<sup>158</sup> This money comes from the American taxpayer. Under the system designed by Congress, while taxpayers

---

<sup>152</sup> 42 U.S.C. § 16512 (“... the Secretary shall make guarantees under this or any other Act for projects on such terms and conditions as the Secretary determines, after consultation with the Secretary of the Treasury, only in accordance with this section).

<sup>153</sup> 42 U.S.C. § 16512(g)(2)(B) (“The rights of the Secretary, with respect to any property acquired pursuant to a loan guarantee or related agreement, shall be superior to the rights of any other person with respect to the property”).

<sup>154</sup> *Id.*

<sup>155</sup> 74 Fed. Reg. 63,544 (Dec. 4, 2009) (to be codified at 10 C.F.R. pt. 609).

<sup>156</sup> See “Terms and Conditions relating to loan agreements for all DOE-backed FIPP projects agreed to after December 4, 2009” (on file with author).

<sup>157</sup> *Id.*

<sup>158</sup> See 42 U.S.C. § 16512(c) (stating “a guarantee by the Secretary shall not exceed an amount equal to 80% of the project cost of the facility that is the subject of the guarantee...”).



are on the hook for at least 80% of the loan in case of default, they will at least be in first position to try to recover their investment based on the sale of the defaulting company's assets.<sup>159</sup> However, under the contracts awarded under § 1705, DOE included *pari passu* terms, which puts a lender in a position equal to the taxpayer with respect to rights to collateral.

The Department of Energy's approach ignores the plain letter of the law. Section 1702(g)(2)(B) contains the *Superiority of Rights* provision ("*Superiority*").<sup>160</sup> *Superiority* provides that "[t]he rights of the Secretary, with respect to any property acquired pursuant to a guarantee, shall be superior to the rights of any other person with respect to the property." The statute clearly requires that DOE maintain superiority with regard to assets acquired as a result of a guarantee, and, as a result, precludes sharing the collateral with other creditors. Such sharing of collateral also flies in the face of the FIPP program requirements, which mandate loan guarantees to cover no more than 80% of any loan.

Consider the following hypothetical example:

DOE guarantees 80% of a billion dollar loan, which defaults. Upon default, the DOE pays \$800 million to the senior creditor protected by the DOE loan guarantee. Assume the leftover assets are worth \$500 million. Under this Administration's *pari passu* construct, DOE shares its senior rights to the recovery with the senior lenders, who already received \$800 million from the loan guarantee. Therefore, DOE recovers 80% of the \$500 million recovery, or \$400 million; the non-guaranteed lenders recover an additional 20% of the \$500 million, which equals \$100 million.

Recall that the lenders already recovered \$800 million for their guaranteed portion. This means that in the aggregate, the private lenders that received the DOE loan guarantee recovered \$900 million of the total billion dollar loan or 90%. Yet the law intended for taxpayers to be in first position with respect to the full \$500 million in this hypothetical. Accordingly, *Pari Passu* terms directly violate the FIPP solicitation requirements.

## **2. Congress Specifically Considered and Rejected Changes to the Superiority Provision that Would Have Allowed for *Pari Passu* Credit Terms**

Supporters of *pari passu* credit terms for DOE loan guarantees sought to change the law to allow for such credit structures. On July 16, 2009, Senate Bill S. 1462, which would have modified Title XVII to allow for *pari passu* credit terms by disabling the *Superiority* provision, was passed by the Senate Energy and Natural Resources Committee, but failed to pass the full Senate.<sup>161</sup> Also, in the last Congress, the House of Representatives passed "Cap and Trade," under H.R. 2454. That bill had an identical provision to disable *Superiority* under Title XVII. H.R. 2454 also failed to become law.

The time invested in drafting a bill and seeking to pass it in both the Senate and the House reflects the effort and analysis that many lawmakers put into this issue. This is the clearest evidence that Congress does not recognize the DOE's authority to provide § 1705 loans

---

<sup>159</sup> See 42 U.S.C. § 16512(g)(2)(B).

<sup>160</sup> *Id.*

<sup>161</sup> See S. 1462, 111th Cong. § 103(b)(3) available at [http://energy.senate.gov/public/\\_files/s1462pcs1.pdf](http://energy.senate.gov/public/_files/s1462pcs1.pdf).

with *pari passu* terms. Rather, the law requires *Superiority* to apply to any property acquired pursuant to the original guarantee or binding agreement to provide a guarantee.

### 3. The Department of Energy Knowingly Violated the Law

Notwithstanding Congress's rejection of these bills that were designed to weaken taxpayer protections, on December 4, 2009, the DOE issued final regulations to allow for *pari passu* treatment of DOE loan guarantees.<sup>162</sup> By these actions, the DOE disregarded the law and Congress. The specific approach used in both S. 1462 and H.R. 2454 highlights the fact that the law currently does not allow for *pari passu* treatment specifically due to the *Superiority* provision. DOE's awareness of Congress's failure to change the law indicates DOE understood it may be violating the law when it provided loan guarantees with *pari passu* credit terms.

The Committee raised these concerns in a letter to the Secretary dated December 7, 2011.<sup>163</sup> The Department of Energy responded by asserting that § 1702(g)(2)(B) only "governs post-default rights of the Secretary, rather than conditions that must be met at the time the Secretary determines to make a loan guarantee."<sup>164</sup> Under the DOE's interpretation of the statute, "[o]nce the Secretary has actually acquired property through the Secretary's right of subrogation in a post-default situation, the statute provides that, as a matter of law, the Secretary's rights in that acquired property are superior to any other claimant with respect to that requirement."<sup>165</sup>

The Department's interpretation is lacking on three levels. First, the Secretary can only secure his superior of rights in collateral *before* entering in a loan guarantee contract. To say § 1702(g)(2)(B) only applies after a default renders the provision useless. Second, the preceding quotation from the DOE's response letter evinces the circularity of its logic: once the Secretary has actually acquired property through the right of subrogation, there is no need to provide for a superiority of rights: he has already acquired the property. Finally, the Department's interpretation ignores Congress' clear pronouncements of its understanding that § 1702(g)(2)(B) prohibits *pari passu* terms. The DOE has never addressed these clear statements of congressional intent.

### IV. DOE Has Artificially Inflated Job Creation Statistics

One characteristic of "green jobs" often touted by the Obama Administration is that green industries rely heavily on manpower, a trait that "makes them especially alluring when it comes to government-led job creation" measured in terms of jobs "created or saved."<sup>166</sup> In studies heralding the creation of large numbers of jobs in green jobs programs, there is a consistent preference for inefficiency.<sup>167</sup> This is contrary to the fundamental economic principle that high

<sup>162</sup> 74 Fed. Reg. 63544, 63545 (Dec. 4, 2009) (to be codified at 10 C.F.R. pt. 609).

<sup>163</sup> Letter from Darrell Issa, Chairman, H. Comm. on Oversight and Gov't Reform, to the Honorable Steven Chu, Sec'y of Energy (Dec. 7, 2011).

<sup>164</sup> Letter from David G. Frantz, Acting Executive Director, Department of Energy Loan Program Office, to Darrell Issa, Chairman, H. Comm. on Oversight and Gov't Reform (Jan. 19, 2012).

<sup>165</sup> *Id.*

<sup>166</sup> Liz Wolgemuth, *The Truth and Green Jobs*, U.S. NEWS AND WORLD REPORT, Mar. 25, 2009 available at <http://money.usnews.com/money/careers/articles/2009/03/25/the-truth-about-all-those-green-jobs>.

<sup>167</sup> *Witnesses Provide Various Definitions of Green Jobs Before House Workforce Panel*, DAILY LABOR REPORT, Apr. 4, 2009 at 60.

labor productivity is a measurement of an efficient and healthy economy.<sup>168</sup> The DOE's 1705 Loan Guarantee Program follows this flawed principle precisely. According to a leading expert, an economy based on "high paying, low-productivity jobs ... would require an economic structure unknown in human history."<sup>169</sup>

While the energy sector is a very large source of employment, it is a mistake to treat it as a government jobs program. Dr. David Montgomery, Senior Vice President at NERA Economic Consulting and a former CalTech professor, has explained:

It is a fundamental error in policymaking and economics to design or justify federal support for new energy technologies as a jobs program. It subverts the entire purpose of government involvement in R&D, and is the greatest single cause of the continued failure of energy technology programs.<sup>170</sup>

However, even accepting the premise that it is appropriate to base a jobs program on green energy development, the Administration fails at this objective.

In almost every public statement about its loan guarantee program, DOE touts job creation. DOE's Loan Programs Office webpage proudly proclaims that DOE expects the loans and loan guarantees to "employ" over 60,000 people.<sup>171</sup> The site also breaks down the number of jobs created or saved by each loan or loan guarantee, and issues press releases for specific projects discussing job creation. These figures are misleading. In reality, the 60,000 number includes jobs that existed at one time, but have since been eliminated; jobs that exist independent of the loan program; and jobs that already existed, but are now considered "green jobs."

One example of DOE's misrepresentation of jobs figures relates to a DOE loan guarantee to Ford Motor Company. DOE proclaims that this project, funded through the ATVM program, accounts for 33,000 of the 61,383 jobs. However, these jobs, which DOE represents to be "permanent jobs created or saved," already existed. Upon closer examination, it appears that DOE reports that the DOE loan "converted" existing jobs to green energy jobs.<sup>172</sup> Had no loan occurred, presumably, the factory would continue to produce non-green energy vehicles; there is no evidence that Ford planned to lay off 33,000 employees if the company had not received the loan. This jobs statistic is also misleading given the statements of David Frantz, Acting Executive Director Loan Program Office and Acting Director ATVM to Committee staff. Mr.

---

<sup>168</sup> *Green Jobs and Red Tape: Assessing Federal Efforts to Encourage Employment: Hearing Before the Subcomm. on Investigations and Oversight of the H. Comm. on Science, Space, and Technology*, 112<sup>th</sup> Cong. (2011) (testimony of W. David Montgomery).

<sup>169</sup> Andrew P. Morriss et. al., *7 Myths About Green Jobs*, PERC Policy Series, No. 44, 2009 available at <http://www.perc.org/files/ps44.pdf>.

<sup>170</sup> Prepared Testimony of W. David Montgomery before the Subcomm. on Investigations and Oversight, H. Comm. on Science, Space and Technology, Apr. 13, 2011, available at [http://www.nera.com/nera-files/Montgomery\\_Testimony\\_4\\_13\\_11.pdf](http://www.nera.com/nera-files/Montgomery_Testimony_4_13_11.pdf)

<sup>171</sup> U.S. Dep't of Energy Loan Programs Office, "Projects" available at: [https://lpo.energy.gov/?page\\_id=45](https://lpo.energy.gov/?page_id=45).

<sup>172</sup> U.S. Dep't of Energy Loan Programs Office, "Projects: Ford Motor Company" available at <https://lpo.energy.gov/?projects=ford-motor-company>.

Frantz stated during a phone interview, “[ATVM] is not a jobs program. [Job creation] is not a governing factor when we do a deal. It’s only a matter of record.”<sup>173</sup>

The screenshot shows the U.S. Department of Energy Loan Programs Office (LPO) website. The header includes the DOE logo, the text "U.S. DEPARTMENT OF ENERGY LOAN PROGRAMS OFFICE", and navigation links for "ABOUT LPO", "GET STARTED", "RESOURCE LIBRARY", "OUR PROJECTS", and "PROGRAMS: 1703 1705 ATVM". A search bar is also present. Below the header, a green banner reads "Advanced Technology Vehicles Manufacturing Loan Program (ATVM)". The main content area features a photo of a white Ford SUV with "HYBRID" and "e" branding, a woman standing next to it, and the Ford logo. To the right of the photo is a table with project details.

Project	Ford Motor Company
Technology	Motor Vehicle Manufacturing
Location	Michigan
Loan Amount	\$5.907 billion
Eligibility	ATVM
Status	Closed
Date of agreement	Sep 2009
Jobs Construction	N/A
Perm Jobs Created or Saved	33,000
Generation Capacity (MW)	N/A

**Ford Motor Company**

Ford Motor Company closed a \$5.9 billion loan arrangement under the Department of Energy's Advanced Technology Vehicles Manufacturing Loan Program to upgrade factories across Illinois, Kentucky, Michigan, Missouri, and Ohio and to introduce new technologies that will raise the fuel efficiency of more than a dozen popular vehicles. The project will convert nearly 33,000 employees to green manufacturing jobs.

DOE also includes failed projects and a project that refused DOE funding in its job creation numbers. Despite Solyndra going bankrupt and firing all of its employees, as of February 20<sup>th</sup>, 2012, DOE still lists Solyndra as creating 3,000 construction jobs (see figure below). While those jobs may have briefly existed, touting jobs for a defaulted project that lost hundreds of millions in taxpayer dollars and including those jobs in a total jobs count prominently displayed on DOE’s website is inappropriate and misleading.

<sup>173</sup> Interview with David G. Frantz Acting Director ATVM Program Jan. 13, 2012.

Some of the projects LPO supports include:

- The first two all-electric vehicle manufacturing facilities in the U.S.
- The world's largest wind farm to date
- Two of the country's first commercial-scale cellulosic ethanol plants
- The first nuclear power plant to be built in the U.S. in the last three decades
- The first distributive photovoltaic energy project on a national scale which places solar panels on commercial rooftops across 28 states
- Several of the world's largest solar generation facilities to include:
  - The largest utility scale photovoltaic generation facility to date
  - The largest concentrated solar power plants in the world, two of which have the world's largest thermal energy storage systems



Program	Technology	Loan Guarantee Amount	Jobs (permanent/ construction)	Date of agreement	Locations	Status
1703						

DOE continues to include in its list of projects a \$105 million loan guarantee it finalized with POET, LLC to build an ethanol plant. According to DOE's website, POET, LLC's loan guarantee will create 40 permanent jobs and 200 construction jobs. However, POET announced on January 23, 2012, that it had decided not to accept the DOE loan guarantee because it had acquired private financing.<sup>174</sup> Despite POET declining DOE's money, as of February 20, 2012, DOE had continued to include it in its job creation numbers (see figure below).

DOE also includes 180 jobs that Abound Solar announced, on February 29, 2012, it will be laying off due to a "retooling" of manufacturing facilities. Abound struggles to compete with Chinese manufactures that provide a comparable solar panel for a more competitive price. When asked about the layoffs, Abound's CEO, Craig Witsoe, stated, "We hate to have any job loss in the company. But it was the right decision for the business."<sup>175</sup> Of the \$400 million DOE loan guarantee received by Abound, the company had already drawn down \$70 million at the time of the layoffs.

<sup>174</sup> Timothy Gardner, *Ethanol maker POET declines U.S. government loan aid*, REUTERS, Jan. 23, 2012 available at <http://www.reuters.com/article/2012/01/23/us-usa-ethanol-loanaid-idUSTRE80M20K20120123>.

<sup>175</sup> Matthew Mosk, *More Green Energy Layoffs: Colorado Solar Firm Cuts Workforce in Half*, ABC NEWS, Feb. 29, 2012 available at <http://abcnews.go.com/Blotter/abound-solar-lays-off-180-workers/story?id=15816806>.



DOE also incorporates jobs figures for Fisker Automotive (Fisker), which announced a 26 employee layoff on February 6, 2012, at their Wilmington, Delaware plant, as well as for Beacon Power Corp, which filed for Chapter 11 bankruptcy in October 2011, eliminating 34 construction and permanent jobs.

In addition to misleading the public regarding the number of permanent jobs created by the loan program, DOE obfuscates the number of jobs “created” by combining temporary and permanent jobs. For each listed loan and loan guarantee project, DOE provides a figure for permanent jobs and construction jobs. As loan projects generally require significant construction, these projects predominantly create temporary construction jobs, which terminate upon a project’s completion. For example, solar generation projects require few permanent employees to maintain and operation the facility. In the case of Antelope Valley Solar Ranch, DOE’s posting reflects 350 temporary construction jobs and only 20 permanent jobs. Nonetheless, DOE reports the number of jobs “saved or created” as 370, even though 95% are temporary.

## **V. The Broken Process for Awarding Loan Guarantees**

### **A. External Pressures on the Program**

DOE’s Inspector General explained that the administration of Recovery Act funds proved to be “more challenging than many had originally envisioned,”<sup>176</sup> and specifically asserted that “the loan guarantee program could not always readily demonstrate through documentation how it resolved or mitigated relevant risks prior to granting loan guarantees.”<sup>177</sup> In addition to these concerns, the Committee has also discovered the existence of a revolving door of persons who worked at green energy investment groups only to later be hired by the Administration, which present significant conflicts of interest. These connections raise the specter of undue influence over the loan guarantee process.

#### **The Revolving Green Door**

*Nancy Ann DeParle*

Nancy Ann DeParle, the current Deputy Chief of Staff for Policy in the White House, had a financial stake in the success of Granite Reliable, which received \$168.9 million loan from DOE. Prior to joining the White House, DeParle was a Managing Director of multi-billion dollar private equity firm CCMP and she both had a financial interest in and sat on the Board of Directors for Noble Environmental Power, LLC.<sup>178</sup> Noble owned Granite Reliable, a wind

---

<sup>176</sup> *The Green Energy Debacle: Where Has All the Taxpayer Money Gone?: Hearing Before the Subcomm. on Regulatory Affairs, Stimulus Oversight, and Government Spending of the H. Comm. on Oversight and Gov’t Reform*, 112th Cong. (2011) (statement of Gregory Friedman, Inspector General, U.S. Dep’t of Energy).

<sup>177</sup> *Id.*

<sup>178</sup> CCMP Capital Company Website available at <http://www.ccmpcapital.com/>.

energy project.<sup>179</sup> Prior to her departure, her position on Noble's board of Directors positioned her to understand the most confidential and material aspects of Noble Environmental and its subsidiary Granite Reliable. DeParle misrepresented her relationship with Noble Energy, claiming on disclosure forms that her interest had been divested, when in fact it had merely been transferred to her 10 year old son.<sup>180</sup>

During her time at the White House, Granite Reliable sought and, in September 2011, obtained a partial guarantee of a \$168.9 million loan.<sup>181</sup> Granite Reliable's application for a DOE loan guarantee was made at least by early 2010, and probably earlier than that, according to signed documents relating to the loan application. Noble sold Granite Reliable in December 2010 to Brookfield Asset Management, just 6 months prior to the conditional approval of the DOE loan guarantee and deep into the application process. The DOE loan guarantee was conditionally approved on June 2011 and finalized in September 2011. DeParle's ownership stake in Noble, which owned Granite Reliable, a beneficiary of a DOE loan, represents a clear conflict of interest.

#### *Michael Froman*

Michael Froman currently serves as the Deputy Assistant to the President and Deputy National Security Advisor for International Economic Affairs.<sup>182</sup> He was a friend of President Obama's from law school,<sup>183</sup> and supported his political career by bundling over \$200,000 for his 2008 presidential candidacy.<sup>184</sup>

Prior to his arrival at the White House, Froman was the Managing Director of Alternative Investments at Citigroup,<sup>185</sup> where he managed infrastructure and sustainable development investments.<sup>186</sup> Citigroup became a major investor in SolarReserve,<sup>187</sup> which ultimately received a \$737 million loan guarantee in September 2011.<sup>188</sup>

<sup>179</sup> Press Release, Noble Environmental Power, Noble Environmental Power Signs Agreement for the Sale of its Interest in its New Hampshire Wind Project (Dec. 7, 2010) *available at* [http://www.noblepower.com/pressroom/documents/10-12-7\\_NEP-SignsAgreementForSaleOfNHWindProject\\_Final.pdf](http://www.noblepower.com/pressroom/documents/10-12-7_NEP-SignsAgreementForSaleOfNHWindProject_Final.pdf).

<sup>180</sup> Nancy Ann DeParle, Executive Branch Personnell Public Financial Disclosure Report (Mar. 9, 2009) *available at* <http://www.scribd.com/doc/62509267/DeParle-Nancy-Ann-278-10A>.

<sup>181</sup> U.S. Dep't of Energy Loan Programs Office, 1705 Program, "Projects: Granite Reliable" *available at* <https://lpo.energy.gov/?projects=granite-reliable>.

<sup>182</sup> Center for Responsive Politics, "Barack Obama Bundlers," OpenSecrets *available at* <http://www.opensecrets.org/pres08/bundlers.php?id=N00009638>.

<sup>183</sup> Jonathan Weisman, *Obama Taps Froman For Joint Security*, *Economic Post*, WALL ST. J., Jan. 30, 2009 *available at* <http://online.wsj.com/article/SB123328110238231817.html>.

<sup>184</sup> OpenSecrets, *supra* note 182.

<sup>185</sup> DealBook, *Citigroup Fund Hit a Speed Bump*, N.Y. TIMES, July 20, 2009 *available at* <http://dealbook.nytimes.com/2009/07/20/citigroup-funds-hit-speed-bump/?ref=michaelfroman>.

<sup>186</sup> Press Release, Harvard Law School, Michael Froman '91 joins White House in joint security, economic post (Feb. 3, 2009) *available at* [http://www.law.harvard.edu/news/2009/02/03\\_froman.html](http://www.law.harvard.edu/news/2009/02/03_froman.html).

*Steve Westly*

Steve Westly co-founded the Westly Group, a clean energy venture capital firm that, according to DOE records, has reaped over \$600 million in DOE loans for its portfolio of investments.<sup>189</sup> One recipient company was Tesla Motors,<sup>190</sup> a premium electric vehicle manufacturer to which DOE awarded a \$465 million loan guarantee in January 2010.<sup>191</sup> Westly also sat on Tesla's Board of Directors in the company's early days.<sup>192</sup>

Westly is a personal friend of President Obama and bundled over \$500,000 for his 2008 campaign.<sup>193</sup> Since the election, Westly has visited the White House multiple times for both business and pleasure, and has privately dined with the President in small group fundraising settings.<sup>194</sup>

After President Obama's election, Westly was rumored to have been a primary candidate for Energy Secretary.<sup>195</sup> When Secretary Chu received the appointment, Westly was given the opportunity to serve on an advisory board to the DOE, "a pivotal [sic] advisory committee that made recommendations to the secretary on alternative energy policies."<sup>196</sup> One committee initiative included a recommendation to modify federal rebates for electric cars, a change that would benefit companies such as Westly Group's Tesla.<sup>197</sup> E-mails released by the White House also indicate that Westly's advisory role gave him access to Obama's top advisors and senior White House officials, including advisor Valerie Jarrett.<sup>198</sup>

*David Sandalow*

---

<sup>187</sup> Jim McElhatton, *Feds guarantee \$1 billion in new solar loans*, WASH. TIMES, Sept. 28, 2011 available at <http://www.washingtontimes.com/news/2011/sep/28/feds-guarantee-1-billion-in-new-solar-loans/?page=all>.

<sup>188</sup> U.S. Dep't of Energy Loan Programs Office, "1705 Program: Projects" available at [https://lpo.energy.gov/?page\\_id=45](https://lpo.energy.gov/?page_id=45).

<sup>189</sup> Carol D. Leonnig and Joe Stephens, *Venture capitalists play key role in Obama's Energy Department*, WASH. POST, Feb. 14, 2012 available at [http://www.washingtonpost.com/politics/venture-capitalists-play-key-role-in-obamas-energy-department/2011/12/30/gIQA05raER\\_story.html](http://www.washingtonpost.com/politics/venture-capitalists-play-key-role-in-obamas-energy-department/2011/12/30/gIQA05raER_story.html).

<sup>190</sup> The Westly Group Company Website, "Portfolio" available at <http://westlygroup.com/portfolio/>.

<sup>191</sup> U.S. Dep't of Energy Loan Programs Office, Advanced Technology Vehicle Manufacturing Program, "Projects: Tesla Motors" available at <https://lpo.energy.gov/?projects=tesla-motors>.

<sup>192</sup> Stephen Frank, "Steve Westly: the Lynchpin to Funny White House Loans," California Political News and Views (Oct. 17, 2011) available at <http://capoliticalnews.com/2011/10/17/steve-westly-the-lynchpin-to-funny-white-house-loans/>.

<sup>193</sup> *Id.*

<sup>194</sup> *Id.*

<sup>195</sup> *Id.*

<sup>196</sup> Leonnig and Stephens, *supra* note 189.

<sup>197</sup> Frank, *supra* note 192.

<sup>198</sup> Leonnig and Stephens, *supra* note 189.



David Sandalow currently serves as the Assistant Secretary for Policy and International Affairs at DOE, where he acts as Secretary's Chu's principal adviser on energy policy as well as coordinates DOE's foreign policy involvement.<sup>199</sup>

Sandalow's ties to the White House date back to the Clinton Administration, during which he worked with President Clinton on environmental issues.<sup>200</sup> After having gained this experience, Sandalow became the influential Chair of the Energy & Climate Working Group of the Clinton Global Initiative.<sup>201</sup> He went on to advise President Obama's presidential campaign in 2008.<sup>202</sup>

Prior to joining the Obama Administration, Sandalow was a senior advisor to Good Energies, Inc., an energy-focused venture capital firm.<sup>203</sup> Good Energies is an investor in SolarReserve,<sup>204</sup> a solar power company that received a \$737 million loan guarantee from DOE in September 2011.<sup>205</sup>

### *Sanjay Wagle*

Sanjay Wagle has most recently served as Renewable Energy Advisor to DOE under Secretary Chu, where he helped oversee the \$11 billion renewable energy program under the Recovery Act.<sup>206</sup> Wagle was an Obama fundraiser for the 2008 presidential campaign, garnering much of his support through his *Clean Tech for Obama* group. Another venture capitalist that has acquired an influential role at DOE, his industry colleagues believed that Wagle, among others, "would help ensure commercial successes from 'the steady flow of dollars coming out of DC.'"<sup>207</sup>

Prior to arriving in Washington, Wagle was a principal at Vantage Point Venture Partners (Vantage Point), a cleantech venture capital firm whose investments received \$2.4 billion in taxpayer funds.<sup>208</sup> Among them were Brightsource, which received \$1.6 billion for solar generation; Tesla Motors, which received \$465 million for electric car manufacturing; and

---

<sup>199</sup> Energy.gov, "About Us: David Sandalow" available at <http://energy.gov/contributors/david-sandalow>; "Who Runs Gov: David Sandalow," WASH. POST available at [http://www.washingtonpost.com/politics/david-sandalow/gIQAR6wHAP\\_topic.html](http://www.washingtonpost.com/politics/david-sandalow/gIQAR6wHAP_topic.html).

<sup>200</sup> "Who Runs Gov: David Sandalow," *supra* note 199.

<sup>201</sup> *Id.*

<sup>202</sup> *Id.*

<sup>203</sup> Press Release, The White House, President Obama Announces More Key Administration Posts (Mar. 20, 2009) available at <http://www.whitehouse.gov/the-press-office/president-obama-announces-more-key-administration-posts-32009>.

<sup>204</sup> Good Energies Company Website, "Investments" available at <http://www.goodenergies.com/investment/companies>.

<sup>205</sup> U.S. Dep't of Energy Loan Programs Office, 1705 Program, "Projects: SolarReserve, LLC" available at <https://lpo.energy.gov/?projects=solarreserve-llc-crescent-dunes>.

<sup>206</sup> Leonnigg and Stephens, *supra* note 189; Event Announcement, Full Circle Fund, Environment/Energy Circle Meeting (Nov. 16, 2011) available at <http://www.fullcirclefund.org/event.php?id=838>.

<sup>207</sup> Leonnigg and Stephens, *supra* note 189.

<sup>208</sup> *Id.*

Mascoma, which received \$80 million for an ethanol plant.<sup>209</sup> Wagle left Vantage Point and moved to DOE shortly after Obama's election, "just as the administration embarked on a massive program to stimulate the economy with federal investments in clean-technology firms."<sup>210</sup> His former firm and the companies it invested in, therefore, had a large stake in the financing decisions being made by DOE at the time.<sup>211</sup>

*Steve Spinner*

Steve Spinner served as an advisor to Secretary Chu from April 2009 to September 2010. In that position, Spinner helped oversee the strategic operations of the clean energy loan guarantee program under the Recovery Act.<sup>212</sup> Spinner was previously an energy-focused venture capitalist and high-tech consultant.<sup>213</sup> He is also an Obama bundler, having raised over \$500,000 for the President in 2008,<sup>214</sup> and over \$200,000 thus far for 2012.<sup>215</sup>

Spinner's wife, Allison Berry Spinner, is a partner at Wilson Sonsini Goodrich & Rosati, the law firm that represented Solyndra on matters related to the DOE loan.<sup>216</sup> According to federal records, the firm received at least \$2.4 million in federal funds for legal fees related to the representation.<sup>217</sup>

White House e-mails released late last year indicate that Spinner was influential in securing the \$528 million loan to now-bankrupt Solyndra. Many of those emails were written just days after he signed an ethics agreement pledging that he would "not participate in any discussion regarding any application involving" his wife's law firm.<sup>218</sup> In one message to a DOE official on August 28, 2009, Spinner wrote, "How hard is this? What is he waiting for? . . . I have OVP and WH breathing down my neck on this."<sup>219</sup> The e-mail went on to demand that the DOE official "walk over there and force [the official working on the Solyndra evaluation] to give [him] an answer."<sup>220</sup> After just being contacted by Solyndra, Spinner inquires in another e-mail, "Any word on OMB? Solyndra's getting nervous."<sup>221</sup> The e-mail correspondence occurring in the final days before the Solyndra loan closed in September 2009 centers heavily on Spinner's

---

<sup>209</sup> *Id.*

<sup>210</sup> *Id.*

<sup>211</sup> *Id.*

<sup>212</sup> Matthew Daly, *Steve Spinner, Energy Department Advisor, Pushed Solyndra Loan, Emails Show*, HUFFINGTON POST, Oct. 7, 2011 available at [http://www.huffingtonpost.com/2011/10/07/obama-fundraiser-pushed-s\\_n\\_1000826.html](http://www.huffingtonpost.com/2011/10/07/obama-fundraiser-pushed-s_n_1000826.html).

<sup>213</sup> Matthew Mosk, *Obama Fundraiser Pushed Solyndra Deal From Inside*, ABC NEWS, Oct. 7, 2011 available at <http://abcnews.go.com/Blotter/obama-fundraiser-pushed-solyndra-deal-inside/story?id=14691618#.TzrE9MXQIsI>.

<sup>214</sup> OpenSecrets, *supra* note 182.

<sup>215</sup> BarackObama.com, "Obama For America Victory Fund 2012 Volunteer Fundraisers" available at <http://www.barackobama.com/pages/volunteer-fundraisers-Q2/>.

<sup>216</sup> Mosk, *supra* note 213.

<sup>217</sup> Daly, *supra* note 212.

<sup>218</sup> Mosk, *supra* note 213.

<sup>219</sup> *Id.*

<sup>220</sup> *Id.*

<sup>221</sup> *Id.*

efforts to coordinate plans for either the President or Vice President to announce the first loan approval at a scheduled visit to Solyndra.<sup>222</sup>

### *Peter Weeks*

Peter Weeks currently serves as Clean Energy Advisor at DOE, a position to which he was appointed in March 2009.<sup>223</sup> To be clear, there is no apparent connection between Mr. Weeks and a project that received a loan from DOE. However, his profound lack of experience in the renewable energy arena before being named as a top DOE advisor causes some concern. Prior to joining the Administration, Weeks's resume consisted primarily of Democratic campaign positions with groups such as Obama for America, Maine Democratic Party, Kerry for President, and Gephardt for President.<sup>224</sup> His prior experience was limited to communications and politics, and includes no record of any energy policy expertise.<sup>225</sup>

According to Weeks, his work at DOE has included helping to “develop due diligence and procurement plans of 200 awards worth over \$10 billion,” as well as “manage two multi-billion dollar energy tax programs.”<sup>226</sup> Additionally, Department e-mails also indicate that Weeks participated in meetings with and had access to high-level officials,<sup>227</sup> including Ron Bloom, giving him the opportunity to participate in decisions and exert some degree of influence.<sup>228</sup> Weeks's position at DOE appears to involve highly technical issues with high stakes and great sensitivity.

It is puzzling how someone without any prior energy, project management, or finance experience would be appointed to a position with responsibilities of this magnitude and particular nature. A private sector institution responsible for due diligence for billions of dollars in loans would never trust someone with only campaign experience to be involved with such technical issues. Given Weeks's consistent history of strong support of the Democratic Party and President Obama, his appointment adds to the perception that many of the Administration's decisions have been driven by politics as opposed to any viable, coherent, energy policy.

## **VI. Concerns Relating to Section 1705 Loan Guarantee Recipients**

### **A. Solopower at CCC+ Setting the Standard for Inappropriate Loan Commitments**

---

<sup>222</sup> *Id.*

<sup>223</sup> Peter Weeks, Linked In, Profile available at <http://www.linkedin.com/in/weekspeter>.

<sup>224</sup> *Id.*

<sup>225</sup> *Id.*

<sup>226</sup> *Id.*

<sup>227</sup> E-mail from Peter Weeks, Clean Energy Advisor, U.S. Dep't of Energy, to Brandon Hurlbut, Udai Rohatgi, Peter Gage, Tom Reynolds, and Rachel Tronstein (Feb. 23, 2011, 6:36 PM EST) (on file with author).

<sup>228</sup> *Id.*

Solopower is a European firm that seeks to build a solar factory in Oregon. Solopower accepted \$40 million of Oregon taxpayer money in addition to DOE's approval of a \$197 million loan via the Federal Financing Bank (FFB).<sup>229</sup> They received this federal assistance despite a rather dire prediction of Solopower's prospects by Standard & Poor's (S&P). According to internal documents obtained by the Committee, S&P warned DOE that:

We believe that [average selling price (ASP) per watt] could decline to \$1 or less within the next 1-2 years. From the output provided by the DOE, we concluded that even if SoloPower achieves the efficiency and yield projections of the DOE's base case, an ASP of \$1 or less would severely strain SoloPower's ability to meet its debt service obligations.<sup>230</sup>

In other words, S&P predicted that Solopower will fail to meet its debt obligations. Additionally, the loan's already extremely poor S&P rating of CCC+ appears to depend on lender protections that prevent loan disbursements unless benchmarks are met:

It is to lenders' advantage that the company will not have access to the credit facility until it constructs and operates Line 1A at expected levels of performance. Similarly, the company cannot make the first or subsequent draws unless 30% of installed capacity is under contract to be sold.<sup>231</sup>

According to S&P, these lender protections enable S&P to provide a CCC+. <sup>232</sup> In short, the primary protection against losing \$197 million of taxpayer money is the small chance that Solopower will ever get the money. Without these protections, it can only be presumed that the credit rating would fall to levels reflecting default.

The story of Solopower reflects a very concerning form of waste that creates substantial uncertainty as a byproduct, tying up private investor capital and federal funds until the entity fails (or succeeds) to achieve targeted benchmarks. If Solopower fails to achieve success sufficient to receive DOE funds, then those private investors anticipating the benefit of DOE loans will suffer substantial loss, resources will have been wasted, and employees will be let go after a short time. However, if Solopower meets the requirements for disbursement, then the likelihood for failure and loss to the taxpayer are significant as the base case for the panel manufacturer's production costs does not reflect expectations for sufficiently competitive pricing.

What Solopower lacked in economic value, it made up for in political connections. Unlike other 1705 loan guarantee recipients, Solopower exerted bipartisan political influence on DOE through strong ties to both the Bush and Obama Administrations. Solopower itself built the ties to the Obama Administration. Bruce Khouri, who served on the Board of Directors<sup>233</sup>

---

<sup>229</sup> Ted Sickinger, *Solyndra Meltdown a Cautionary Tale for Oregon and SoloPower, its Latest Solar Bet*, The Oregonian, Sept. 27, 2011, *available at* [http://www.oregonlive.com/business/index.ssf/2011/09/solyndras\\_plight\\_casts\\_cautionary\\_tale\\_for\\_oregon\\_and\\_solopower\\_its\\_latest\\_solar\\_bet.html](http://www.oregonlive.com/business/index.ssf/2011/09/solyndras_plight_casts_cautionary_tale_for_oregon_and_solopower_its_latest_solar_bet.html).

<sup>230</sup> Standard & Poors Credit Report, Solopower, Inc., July 11, 2011 (on file with author).

<sup>231</sup> *Id.*

<sup>232</sup> *Id.*

<sup>233</sup> Board of Directors, Solopower, *available at* <http://www.solopower.com/brucekhouri.html> (last visited Mar. 15, 2012).

and now serves as the Chief Commercial Officer,<sup>234</sup> donated \$28,500 to the Democratic National Committee's "Obama Victory Fund" in 2008.<sup>235</sup> Lou DiNardo, who served as interim CEO<sup>236</sup> and now serves as Chairman of the Board of Directors, previously worked as a General Partner at VantagePoint Venture Partners where DOE stimulus advisor Sanjay Wagle worked.<sup>237</sup> Solopower, based in San Jose, California, developed an ally in Democratic San Jose Mayor Chuck Reed. Mayor Reed sent letters to DOE and talked with DOE's Jonathan Silver in person to advocate for and attempt to speed up Solopower's loan guarantee.<sup>238</sup>

Hudson Clean Energy Partners, the biggest investor in Solopower,<sup>239</sup> had strong ties to the Bush-era DOE. Craig Cornelli, a member of the Board of Directors at Solopower and Managing Director at Hudson Clean Energy Partners, and Alexander Karsner, a member of the Hudson Clean Energy Partners Advisory Board, both worked in renewable energy positions for DOE during the Bush Administration.<sup>240</sup> Another Managing Partner for Hudson Clean Energy Partners, Neil Auerbach, donated tens of thousands of dollars to Republicans in 2008.<sup>241</sup> Hudson Clean Energy Partners also retained BlueWater Strategies to lobby both branches of Congress and the White House.<sup>242</sup> According to BlueWater Strategies' website, Andrew Lundquist, founder and Managing Partner, "led George W. Bush's transition team for the Department of Energy" and "served as a senior advisor and strategist on energy issues for the President and Vice President."<sup>243</sup>

With its ties to DOE officials in both the previous and current Administrations, Solopower had people on both sides of the political aisle that could use their influence to pressure DOE into issuing and finalizing Solopower's loan guarantee.

## B. Beacon Power: Taxpayers Predictably Lose Millions

Led by CEO F. William Capp – an Obama donor<sup>244</sup> – Beacon Power became the second 1705 loan guarantee recipient to go bankrupt on October 31, 2011.<sup>245</sup> Despite warnings from

<sup>234</sup> Management, Solopower, available at <http://www.solopower.com/management.html> (last visited Mar. 15, 2012).

<sup>235</sup> Federal Election Commission, FEC Form 3X filed by 2008 Obama Victory Fund, at 1650.

<sup>236</sup> Press Release *SoloPower Prepares for Market Entry and Names Lou DiNardo as Interim CEO*, July 8, 2009, available at <http://www.solopower.com/ceov11.html>.

<sup>237</sup> Lou DiNardo, SoloPower, available at <http://www.solopower.com/loudinardo.html> (last visited Mar. 15, 2012).

<sup>238</sup> Aaron Glantz, *After Solyndra, a 2<sup>nd</sup> Solar Energy Firm Is Scrutinized*, N.Y. TIMES, Oct. 15, 2011, available at: <http://www.nytimes.com/2011/10/16/us/after-solyndra-a-2nd-solar-energy-firm-is-scrutinized.html?pagewanted=all>.

<sup>239</sup> *Id.*

<sup>240</sup> Joel Gehrke, *Solopower, a Connected Company with DOE Support*, THE EXAMINER, Nov. 9, 2011, available at <http://campaign2012.washingtonexaminer.com/blogs/solopower-connected-company-doe-support>.

<sup>241</sup> Aaron Glantz, *After Solyndra, a 2<sup>nd</sup> Solar Energy Firm Is Scrutinized*, N.Y. TIMES, Oct. 15, 2011, available at: <http://www.nytimes.com/2011/10/16/us/after-solyndra-a-2nd-solar-energy-firm-is-scrutinized.html?pagewanted=all>.

<sup>242</sup> *Id.*

<sup>243</sup> Andrew D. Lundquist, available at [http://www.bwstrategies.com/index.php?option=com\\_content&task=view&id=35&Itemid=22](http://www.bwstrategies.com/index.php?option=com_content&task=view&id=35&Itemid=22) (last visited Mar. 15, 2012).

<sup>244</sup> Center for Responsive Politics, available at <http://www.opensecrets.org/indivs/search.php?name=capp&state=MA&zip=&employ=&cand=&c2012=Y&c2010=Y&c2008=Y&sort=N&capcode=ws3w&submit=Submit+your+Donor+Query> (last visited Mar. 15, 2012).

<sup>245</sup> Dawn McCarty, *Beacon Power, Backed by U.S. Loan Guarantees, Files Bankruptcy*, BLOOMBERG, Oct. 31, 2011, available at: <http://www.businessweek.com/news/2011-10-31/beacon-power-backed-by-u-s-loan-guarantees-files-bankruptcy.html>.

both S&P and its own internal analysis regarding risky business models, DOE proceeded with a deal that will cost taxpayers millions in losses.

Before its demise, Beacon Power relied on funding from the federal government. DOE gave Beacon Power over \$25 million in grants.<sup>246</sup> However, the largest investment came when DOE announced a conditional \$43 million loan guarantee to Beacon Power on July 2, 2009, to create a “20 megawatt flywheel energy storage plant” in Stephentown, New York.<sup>247</sup> In April 2010, S&P evaluated the loan guarantee project and assigned it a dismal CCC+ credit rating, even though the rating incorporated the benefit of the \$43 million loan guarantee.<sup>248</sup> The S&P rating noted that “Beacon is currently an unprofitable start-up” and that “significant exposure to commodity price volatility” could significantly hurt the company.<sup>249</sup> S&P ran two default scenarios, both of which demonstrated that taxpayers would lose millions.<sup>250</sup> DOE conducted its own risk analysis and also assigned Beacon Power a junk CCC+ rating.<sup>251</sup> DOE, however, ignored these warnings and finalized the loan guarantee in August 2010.<sup>252</sup>

As predicted, Beacon Power continued to remain unprofitable and burn through money at a rapid rate. In the weeks leading up to its bankruptcy, Beacon Power began spending hundreds of thousands of dollars on law firms.<sup>253</sup> When Beacon Power went bankrupt, DOE tried to minimize the bad publicity by arguing that it had required “many protections for the taxpayer” in the loan guarantee contract.<sup>254</sup> However, as Beacon Power continues to go through the bankruptcy process, DOE now admits that taxpayers will likely lose millions on this bad investment.<sup>255</sup> DOE could have avoided these losses by taking the warnings of S&P and its own analysis seriously and not risking over \$39 million on a company destined for failure.

### C. Abound Solar: Politics and a Risky Investment Collide

<sup>246</sup> Steven Mufson and Juliet Eilperin, *Beacon Power Declares Bankruptcy; Second Loan Guarantee Recipient to Falter*, THE WASH. POST, Oct. 31, 2011, available at [http://www.washingtonpost.com/national/health-science/beacon-power-declares-bankruptcy-second-loan-guarantee-recipient-to-falter/2011/10/31/gIQCNAaaM\\_story.html](http://www.washingtonpost.com/national/health-science/beacon-power-declares-bankruptcy-second-loan-guarantee-recipient-to-falter/2011/10/31/gIQCNAaaM_story.html).

<sup>247</sup> Press Release, *Obama Administration Offers \$59 Million in conditional Loan Guarantees to Beacon Power and Nordic Windpower, Inc.*, U.S. Dep’t of Energy, July 2, 2009, available at: <https://lpo.energy.gov/?p=834>. Beacon Power created a wholly owned subsidiary called Stephentown Regulation Services, LLC., that ran the DOE funded flywheel energy storage plant and directly received the DOE loan guarantee. When Beacon Power, the parent company, went bankrupt on October 31<sup>st</sup>, it decided to place its subsidiaries in bankruptcy as well.

<sup>248</sup> Letter from Swami Venkataraman, Standard & Poors, to Beacon Power, April 30, 2010 (on file with author).

<sup>249</sup> *Id.*

<sup>250</sup> *Id.*

<sup>251</sup> Letter from David Frantz, Acting Executive Director of Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Comm. on Oversight and Gov’t Reform, Feb. 14, 2012 (on file with author).

<sup>252</sup> Beacon Power Corporation, U.S. Dep’t of Energy, available at <https://lpo.energy.gov/?projects=beacon-power-corporation> (last visited Mar. 15, 2012).

<sup>253</sup> Beacon Power Bankruptcy Filings, Provided to Committee by U.S. DOE (on file with author).

<sup>254</sup> Dawn McCarty, *Beacon Power, Backed by U.S. Loan Guarantees, Files Bankruptcy*, BLOOMBERG, Oct. 31, 2011, available at: <http://www.businessweek.com/news/2011-10-31/beacon-power-backed-by-u-s-loan-guarantees-files-bankruptcy.html>.

<sup>255</sup> Letter from David Frantz, Acting Executive Director of Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Comm. on Oversight and Gov’t Reform, Feb. 14, 2012 (Stating “the DOE stands to recover more than 70 percent of the taxpayer’s investment.” However, even if DOE recovered 80 percent of its investment, taxpayers would still lose millions).

On July 3, 2010, President Obama announced during his weekly radio address that DOE would again invest hundreds of millions of dollars in a risky solar panel manufacturer. Much like Solyndra, Abound Solar manufactures solar panels using unproven technology, received a dismal credit rating for its loan guarantee, and has strong Democratic political connections. In fact, DOE finalized Abound Solar's loan in the same month that DOE worked to restructure the failing Solyndra's loan.

In between DOE issuing Abound Solar its \$400 million conditional loan guarantee and finalizing it in December 2010, Fitch Ratings evaluated the project and assigned it a junk credit rating. Fitch gave the project a credit rating of "B" (worse than Solyndra's) with a recovery estimate of only 45%.<sup>256</sup> Despite including the benefit of the DOE loan guarantee in the rating (which likely made the rating more favorable), Fitch labeled the project "highly speculative" and described Abound as lagging in technology relative to its competitors, failing to achieve stated efficiency targets, and expecting that Abound Solar will suffer from increasing commoditization and pricing pressures.<sup>257</sup> In addition to these concerns, Fitch worried that Abound Solar needed to raise more private money to build its new facilities and that, if it could not, Abound Solar could default on its DOE loan.<sup>258</sup>

Recently, Abound Solar began encountering the financial problems that Fitch predicted. In line with Fitch's prediction, Abound Solar has recently struggled to raise additional capital, causing DOE to stop disbursing loan payments to the company.<sup>259</sup> More troubling, Abound Solar announced on March 1<sup>st</sup> that it would stop producing solar panels and would fire 180 employees, even though it has already received \$70 million from DOE.<sup>260</sup> Abound Solar continues to claim publicly that it does not have serious financial problems and will survive;

---

<sup>256</sup> Letter from Jason Paraschac, Senior Director, Fitch Ratings, to Steve Abely, Chief Financial Officer, Abound Solar, Nov. 4, 2010 (on file with author).

<sup>257</sup> See *id.* at 4

"Abound's lagging conversion efficiency negatively impacts the panel's installed costs which should negatively impact expected panel [average selling prices]. In addition, Fitch expects further price pressures in this market over the next 3-5 years..."

"Abound has not provided an explanation as to why gains in [solar panel] conversion efficiency have not materialized as expected..."

"[Average selling price] assumptions in the new model are significantly below the prior plan. While this may in part reflect the lower conversion efficiency of [Abound's] solar panel, it is largely a reflection of severe price contractions in the [solar photovoltaic panel] market over the past 24 months."

<sup>258</sup> See *id.* at 7

"Abound must raise additional equity to fund the completion of its planned manufacturing facilities. An inability to access equity markets could force an early default of the loan before construction is complete but also before the loan is fully drawn down."

<sup>259</sup> Yuliya Chernova and Cassandra Sweet, *California Solar Deal Hits a Snag*, THE WALL ST. J., Feb. 11, 2012, available at: <http://online.wsj.com/article/SB10001424052970203646004577214973345400202.html>.

<sup>260</sup> Todd Woody, *Abound Solar, Recipient of \$400 Million Federal Loan Guarantee, Halts Production*, FORBES, Mar. 1, 2012, available at <http://www.forbes.com/sites/toddwoody/2012/03/01/abound-solar-recipient-of-400-million-federal-loan-guarantee-halts-production/>.

however, its inability to raise capital and meet DOE's requirements likely indicate serious troubles ahead for the company, as predicted by Fitch.

Abound Solar has ties to Democratic politicians at the federal level and the state level in Colorado. Bohemian Companies, LLC, founded by Pat Stryker, became an early investor in Abound Solar (at the time AVA Solar) in October, 2008.<sup>261</sup> In addition to the initial funding, the CEO of Bohemian Companies, Joseph Zimlich, has served as both a director<sup>262</sup> and a board member of Abound Solar.<sup>263</sup> Pat Stryker is a major Democratic donor who *Forbes* included on its 2011 list of top liberal spenders.<sup>264</sup> In 2008, Stryker donated \$50,000 and bundled \$87,500 for President Obama's 2009 inauguration, and has given \$35,800 to the 2012 Obama Victory Fund.<sup>265</sup> Abound Solar also developed ties to Congressional Democrats. The company hired then Democratic Congressman Paul Kanjorski's nephew Russell as its vice president for marketing.<sup>266</sup> Abound Solar supported the 2009 cap and trade bill in the House of Representatives and funded an advertisement thanking then-Colorado Democratic Congresswoman Betsy Markey for her vote in favor of the bill.<sup>267</sup>

At the state level, then-Democratic Colorado Governor Bill Ritter strongly supported Abound Solar and its application for a DOE loan guarantee. When Energy Secretary Chu visited Colorado, Governor Ritter handed Secretary Chu a letter urging him to approve Abound Solar's loan guarantee because it would allow the company to expand and hire new workers.<sup>268</sup>

The combination of Abound Solar's junk credit rating, financial problems, and the company's political connections raise serious concerns about whether DOE based the decision to invest \$400 million on merit and whether taxpayers could again lose millions on a dubious solar manufacturing project.

#### **D. Ormat Nevada: Strong Ties to Harry Reid**

Senate Majority Leader Harry Reid announced on September 23, 2011, that DOE finalized a \$350 million partial loan guarantee for three geothermal power plants owned by Ormat Nevada, Inc.<sup>269</sup> Ormat also benefitted from the \$98.5 million loan guarantee to Nevada

<sup>261</sup> Press Release, *AVA Solar Completes \$104 Million Equity Financing*, Abound Solar, Oct., 2008, available at <http://www.abound.com/news/ava-solar-completes-104-million-equity-financing>.

<sup>262</sup> See: U. S. Securities and Exchange Commission Form D, AVA Solar, Inc., Dec. 21, 2010, available at: [http://sec.gov/Archives/edgar/data/1391624/000139162410000003/xslFormDX01/primary\\_doc.xml](http://sec.gov/Archives/edgar/data/1391624/000139162410000003/xslFormDX01/primary_doc.xml).

<sup>263</sup> See The Board of Governors of the Colorado State University System, Colorado State University System, available at <http://csusystem.edu/pages/board.asp>.

<sup>264</sup> Jon Bruner and Clare O'Connor, *Liberal Spenders*, FORBES, Sept. 21, 2011, available at <http://www.forbes.com/forbes/2011/1010/forbes400-11-networks-data-driven-liberal-spenders-bruner-oconner.html>.

<sup>265</sup> Keenan Steiner, *Another Renewable Energy Loan Recipient Hires Lobbyists, has Fundraising Ties to Obama*, Sunlight Foundation, Nov. 30, 2011, available at <http://reporting.sunlightfoundation.com/2011/another-renewable-grantee-hires-lobbyists-has-fundraising-ties-o/>.

<sup>266</sup> Bill O'Boyle, *Kanjo Nephew Works at firm that Gets Loan*, THE TIMES LEADER, July 13, 2010, available at [http://www.timesleader.com/news/Kanjo\\_nephew\\_works\\_at\\_firm\\_that\\_gets\\_loan\\_07-12-2010.html](http://www.timesleader.com/news/Kanjo_nephew_works_at_firm_that_gets_loan_07-12-2010.html).

<sup>267</sup> Thank You Betsy Markey, The Environmental Defense Action Fund, July 15, 2009, available at <http://www.youtube.com/watch?v=uvBD3XvRf2Y> (last visited Mar. 15, 2012).

<sup>268</sup> Cathy Proctor, *Ritter Backing Colo. Companies Seeking Department of Energy Loan Guarantees*, DENVER BUS. J., May 17, 2009, available at <http://www.bizjournals.com/denver/stories/2009/05/18/story5.html?page=all>.

<sup>269</sup> Press Release, *Reid Announces Finalized Loan Guarantee for Ormat Geothermal Projects*, United States Senator Harry Reid, Sept. 23, 2011, available at [http://reid.senate.gov/newsroom/pr\\_092311\\_geothermalloan.cfm](http://reid.senate.gov/newsroom/pr_092311_geothermalloan.cfm).



Geothermal (see below) as Ormat received an almost \$80 million engineering, procurement, and construction contract to build Nevada Geothermal's Blue Mountain plant.<sup>270</sup>

Meaningful ties exist between the Senator and Ormat. Two of Ormat's federal lobbyists previously worked for Senator Reid. Ormat's outside lobbyist, Kai Anderson of Cassidy and Associates, served as Senator Reid's Deputy Chief of Staff up until 2005.<sup>271</sup> Anderson lobbies both the House of Representatives and the Senate for Ormat.<sup>272</sup> Anderson has given close to \$90,000 to Democratic candidates and campaign committees over the past three cycles, including thousands to Senator Reid.<sup>273</sup> Ormat's company lobbyist, Director of Policy and Business Development Paul Thomsen, served as a "Regional Representative" for Senator Reid through 2005.<sup>274</sup> Thomsen gave thousands in political contributions to Senator Reid.<sup>275</sup> During Senator Reid's 2010 reelection campaign, Thomsen starred in a campaign ad for Senator Reid to advertise the benefits of Ormat's loan guarantee for Nevada.<sup>276</sup> In addition to Anderson and Thomsen, Ormat's President, Yoram Bronicki, gave thousands in political contributions to Senator Reid.<sup>277</sup> The strong ties between the company and the Senate Majority leader raise questions about whether the DOE acted in the best interests of the American people when it approved the loan guarantee.

### E. Nevada Geothermal's Blue Mountain Project

On June 15, 2010, DOE announced that it would conditionally issue a \$98.5 million partial loan guarantee to Nevada Geothermal Power Company (Nevada Geothermal).<sup>278</sup> This loan enabled Nevada Geothermal to refinance the Blue Mountain Geothermal Project (Blue Mountain) through John Hancock Financial Services (John Hancock). In other words, the DOE

<sup>270</sup> Nevada Geothermal Application for DOE Loan Guarantee, U.S. Dep't of Energy, Nov. 2, 2009 (on file with author).

<sup>271</sup> Eric Lipton and Clifford Krauss, *A U.S.—Backed Geothermal Plant in Nevada Struggles*, N.Y. TIMES, Oct. 2, 2011, available at <http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all>; Kai S. Anderson, Congressional Staffer—Salary Data, Legistorm: Transparency's Sidekick, available at [http://www.legistorm.com/person/Kai\\_S\\_Anderson/201.html](http://www.legistorm.com/person/Kai_S_Anderson/201.html).

<sup>272</sup> See Lobbying Report for Cassidy & Associates, available at <http://soprweb.senate.gov/index.cfm?event=getFilingDetails&filingID=68E4AB5B-FB37-4072-AA8E-187A97BF8E66>.

<sup>273</sup> Center for Responsive Politics, available at <http://www.opensecrets.org/indivs/search.php?capcode=t3hhk&name=anderson,%20kai&employ=&cand=&state=DC&zip=&all=n&old=N&c2008=Y&c2010=Y&c2012=Y&sort=N&page=1>.

<sup>274</sup> Eric Lipton and Clifford Krauss, *A U.S.—Backed Geothermal Plant in Nevada Struggles*, N.Y. TIMES, Oct. 2, 2011, available at <http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all>; Paul Thomsen, Congressional Staffer—Salary Data, Legistorm: Transparency's Sidekick, available at [http://www.legistorm.com/person/Paul\\_Thomsen/30414.html](http://www.legistorm.com/person/Paul_Thomsen/30414.html); *Legislative Hearing on H.R. 2170, H.R. 2171, H.R. 2172 and H.R. 2173 Before H. Comm. on Energy and Power*, 112th Cong. (2011) (statement of Paul A. Thomsen, Director of Policy and Business Development, Ormat Technologies, Inc.).

<sup>275</sup> Center for Responsive Politics, available at <http://www.opensecrets.org/indivs/search.php?name=&state=&zip=&employ=ormat&cand=&c2012=Y&c2010=Y&c2008=Y&sort=N&capcode=xbhnq&submit=Submit+your+Donor+Query> (last visited Mar. 15, 2012).

<sup>276</sup> See Geothermal, Harry Reid 2010, June 10, 2010, available at [http://www.youtube.com/watch?v=XvI\\_AY68BjQ&feature=plcp&context=C305c198UDOEgToPDskIRhi7yhmpxqikeNWd9-nC0](http://www.youtube.com/watch?v=XvI_AY68BjQ&feature=plcp&context=C305c198UDOEgToPDskIRhi7yhmpxqikeNWd9-nC0); *Reid Campaign Releases TV Ads on Clean Energy Jobs*, Friends for Harry Reid, available at [http://www.harryreid.com/index.php/news/release/reid\\_campaign\\_releases\\_tv\\_ads\\_on\\_clean\\_energy\\_jobs/](http://www.harryreid.com/index.php/news/release/reid_campaign_releases_tv_ads_on_clean_energy_jobs/).

<sup>277</sup> *Id.*

<sup>278</sup> Press Release, *Energy Department Offers Conditional Commitment to Support Nevada Geothermal Development with Recovery Act Funds*, U.S. Dep't of Energy, June 15, 2010, available at: <https://lpo.energy.gov/?p=805>.

loan paid back a prior financial obligation of Nevada Geothermal. This was the first of DOE's "Financial Institution Partnership Program" (FIPP) loan guarantees, under Section 1705, where private investment groups worked with DOE to provide financing to energy projects.<sup>279</sup> Less than three months after the conditional approval, DOE finalized this loan guarantee, enabling Nevada Geothermal to refinance a loan from TCW through John Hancock.<sup>280</sup>

The loan did not finance any new construction and therefore did not help to create a single new job. DOE's awarding of this loan guarantee raises questions about why DOE was investing significant taxpayer resources in an entity with well-established financial difficulties.

In the press release for the project, Secretary Chu and Senate Majority Leader Harry Reid touted Blue Mountain's potential, with Senator Reid saying that, "I am glad to see economic recovery funding being used to put Nevadans to work on a project that will help us achieve energy independence. Northern Nevada is the Saudi Arabia of geothermal energy and I thank Secretary Chu for recognizing the Silver State's enormous job-creating potential to produce plenty of clean and affordable energy."<sup>281</sup> It was known to him at that time, however, that the loan would not create a single job, but instead simply refinance an existing loan, despite DOE's claim that it would create over 200 jobs.<sup>282</sup>

#### *1. Misuse of the DOE Loan Guarantee as a Tool to Bailout Creditors*

Nevada Geothermal has a well documented history of major financial problems. By the time DOE conditionally approved the loan guarantee, Nevada Geothermal had already violated contract terms and debt covenants relating to financing from its primary lender, TCW. According to Nevada Geothermal's financial statements, the firm would not avoid default without the benefit of a loan guarantee.

On October 2, 2011, *The New York Times* ran a story about the financial difficulties of Nevada Geothermal, relying partially on a September 2011 Deloitte & Touche audit of the company which stated "significant doubt about the company's ability to continue as a going concern."<sup>283</sup> In response, DOE dismissed the financial problems of Nevada Geothermal and instead pointed to the alleged financial health of Blue Mountain to argue that the loan guarantee would be repaid.<sup>284</sup> Given that Nevada Geothermal's principal operation is Blue Mountain's Faulkner I Power Plant, such a distinction has questionable merit.<sup>285</sup>

---

<sup>279</sup> Press Release, *Department of Energy Issues Loan Guarantee Supported by Recovery Act for Nevada Geothermal Project*, U.S. Dep't of Energy, Sept. 7, 2010, available at <https://lpo.energy.gov/?p=787>.

<sup>280</sup> *Id.*

<sup>281</sup> *Id.*

<sup>282</sup> Loan Programs Office, U.S. Dep't Of Energy, available at [https://lpo.energy.gov/?page\\_id=45](https://lpo.energy.gov/?page_id=45) (last visited Mar. 15, 2012).

<sup>283</sup> Eric Lipton and Clifford Krauss, *A U.S.-Backed Geothermal Plant in Nevada Struggles*, N.Y. TIMES, Oct. 2, 2011, available at <http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all>.

<sup>284</sup> Peter Urban, *DOE Remains Confident in Nevada Geothermal Plant*, LAS VEGAS REVIEW-JOURNAL, Oct. 4, 2011, available at <http://www.lvrj.com/news/doe-remains-confident-in-nevada-geothermal-plant-131035678.html>.

<sup>285</sup> See Nevada Geothermal Power Inc., Consolidated Financial Statements, June 30, 2010 at 6, available at [http://www.nevadageothermal.com/i/pdf/Annual\\_Financials\\_2010.pdf](http://www.nevadageothermal.com/i/pdf/Annual_Financials_2010.pdf).

As noted above, at the time DOE approved the conditional loan guarantee, Nevada Geothermal had already violated terms to the loan agreement with its primary creditor, TCW. Based on financial disclosures, Nevada Geothermal avoided default as a result of TCW's granting a waiver and extension in anticipation of the John Hancock financing backed by the DOE loan guarantee. The resulting DOE bailout of Nevada Geothermal was planned out in advance, as made clear by Nevada Geothermal's March 31, 2010 Financial Statements:

The Company has engaged John Hancock to provide long term debt up to \$95 million which will be used to pay down the TCW loan and to fund additional drilling. However, this potential John Hancock loan is subject to due diligence and final credit committee approval by John Hancock. There is no certainty that the anticipated debt financing through John Hancock will be obtained. **Failure to obtain the John Hancock loan, or a similar loan from another lender, and/or unsuccessful drilling may result in a default under the terms of the TCW loan agreement. In the event of a default TCW may elect to call the loan and execute upon the security, which would result in a material adverse effect on the Company,** including delay or indefinite postponement of operations and further exploration and development of our projects with the possible loss of such assets.<sup>286</sup> (emphasis added)

The story continued to unfold in Nevada Geothermal's June 30, 2010 Financial Statements, where the plan to bailout their lender, TCW, was successfully executed by DOE:

**As at June 30, 2010, the Company was not in compliance with the terms of the TCW loan.** The non-compliance results from the Company having exceeded the maximum loan amount of \$180 million, and having exceeded the drilling expenditure budget by more than \$3.8 million, as well as some instances of technical non-compliance with other loan terms .... **As a result, for balance sheet purposes, the TCW long-term loan has been classified as a short-term liability.** On November 20, 2009, TCW agreed in principle to waive the non-compliance until March 31, 2010 in return for 4.5 million NGP Inc. warrants exercisable at CAD 1.50 (Note 21(f)). Subsequently, **TCW agreed to extend the agreement in principle, without change, until the John Hancock loan [guaranteed by DOE<sup>287</sup>] closed. The John Hancock loan was closed on**

<sup>286</sup> Nevada Geothermal Power, Inc., Consolidated Financial Statements, Mar. 31, 2010, at 11, *available at* [http://www.nevadageothermal.com/i/pdf/Q3\\_March\\_31\\_2010.pdf](http://www.nevadageothermal.com/i/pdf/Q3_March_31_2010.pdf).

<sup>287</sup> Nevada Geothermal Power, Inc., Consolidated Financial Statements, June 30, 2010, at 55, *available at* [http://www.nevadageothermal.com/i/pdf/Annual\\_Financials\\_2010.pdf](http://www.nevadageothermal.com/i/pdf/Annual_Financials_2010.pdf) (Explaining the John Hancock loan guaranteed by DOE: "On October 13, 2009 the Company [Nevada Geothermal] announced that it appointed John Hancock Life Insurance Company ("John Hancock") to be the exclusive debt provider for up to \$95 Million 20-year term loan. Further to the above, on October 7, 2009, the DOE announced its Financial Institutions Partnership Program ("FIPP"), a program supported by the 2009 ARRA. The FIPP program is designed to facilitate long term financing for renewable development projects using commercial technology and applies to up to 80 percent of the loan amount. John Hancock, as Lender for the Blue Mountain 'Faulkner 1' geothermal project, made an application to the DOE for a Loan Guarantee under the FIPP. The loan guarantee was conditionally approved on June 15, 2010, and the loan closed on September 3, 2010....At the closing of the John Hancock/DOE loan after paying associated fees and funding reserve accounts for drilling, interest and plant maintenance the Company paid the TCW loan down to approximately \$86.9 million. The Company plans to apply for a second ARRA grant based upon work, to

**September 3, 2010, and a repayment of \$81,076,669 was made on the TCW loan.<sup>288</sup>** (emphasis added)

Confirming this troubling misdirection of taxpayer funds, the Summary of Proposed Terms and Conditions for the Conditional Loan Guarantee, signed by Secretary Chu, provides that the “proceeds of the Guaranteed Obligation will be used for the following: (i) Partial repayment of intercompany loan from HoldCo [Blue Mountain], in the amount of approximately 80 million;...”<sup>289</sup> This intercompany repayment would ultimately flow to TCW as described above. The remaining amount of the loan went to the posting of cash collateral to NV Energy, Inc., funding a debt service reserve account, funding a maintenance reserve account, funding a drilling expenditure account (which included already incurred costs), and other fees. As these numbers total to around \$98 million, it appears that little, if any, of the loan went to fund new drilling or new construction.<sup>290</sup>

**2. *This Bailout Appears to Violate the American Recovery and Reinvestment Act of 2009***

Not only does it appear that DOE purposely directed taxpayer funds to a failing enterprise, DOE’s action robbed taxpayers of genuine investment toward renewable energy. This loan guarantee bailed out lenders (TCW) and provided no assurance that TCW would apply the money that it recovered toward the economy or jobs as required by the American Recovery and Reinvestment Act of 2009.

Title XVI, Section 1602 of the American Recovery and Reinvestment Act of 2009, requires that “recipients shall also use grant funds in a manner that maximizes job creation and economic benefit.”<sup>291</sup> Paying off a creditor clearly does not maximize job creation and economic benefits. Rather, it provides an opportunity for private industry to exit an investment, deleverage and transfer the extraordinarily high default risk to taxpayers.

---

increase power production, subsequent to the first grant that will be partially funded by the John Hancock/DOE loan.”).

<sup>288</sup> *Id.*

<sup>289</sup> Loan Guarantee LGPO Loan Number: F1001, U.S. Dep’t of Energy, June 15, 2010 at. 4 (on file with author).

<sup>290</sup> Nevada Geothermal Power, Inc., Conditional Loan Guarantee, U.S. Dep’t of Energy, Summary of Terms and Conditions at 4 Summary of Terms and Conditions (Stating “USE OF PROCEEDS: The proceeds of the Guaranteed Obligation will be used for following:

- (i) Partial repayment of intercompany loan from HoldCo in the amount of approximately \$80 million;
- (ii) Funding security requirements under the power purchase agreement signed on August 18, 2006 with NV Energy, f/k/a Nevada Power Company (“PPA”), either by posting cash collateral, cash collateralizing one or more letters of credit, or otherwise in accordance with the PPA in amount of \$3.8 million (the “PPA Credit Support”);
- (iii) Funding of the Debt Service Reserve Account in the amount of approximately \$5.5 million, Major Maintenance Reserve Account in the amount of \$125,000, and Drilling Expenditure Account in the amount of approximately \$8,400,000 (less amounts applied to reimburse the Borrower for Project Costs incurred prior to the Closing Date in connection with the Additional Wells (as defined below));
- (iv) The payment of certain fees and transaction expenses associated with the Guaranteed Obligation which are permitted to be paid with such proceeds under the Solicitation as set forth in Schedule 1; and
- (v) Initial funding of the Operating Account with all remaining proceeds of the Guaranteed Obligation.”).

<sup>291</sup> American Recovery and Reinvestment Act of 2009 §1602, Pub. L. No. 111-5.

For this reason, it appears DOE, in its very first FIPP section 1705-based loan guarantee, violated the spirit and, quite possibly, the letter of the law.

3. *Given the “Pari Passu” Deal Terms and the Required Consent of all Lenders to Reorder Priority, the Terms of the DOE Loan Guarantee Appear to Violate the Requirement of Superiority under Title XVII, Section 1702(g)(2)(B)*

The Summary of Terms and Conditions in the Conditional Loan Guarantee signed by Secretary Chu that relates to the Blue Mountain loan guarantee, at page 8, provides for a pari passu and pro-rata right of payment for senior creditors.<sup>292</sup> This means that the unguaranteed senior lender, John Hancock, stands equal to taxpayers in terms of recovering a share of their loss in the event of default. The Summary of Terms also requires the consent of all Lenders in the event that DOE seeks to “change to the priority of payment in the payment waterfall.”<sup>293</sup> The combination of the pari passu credit terms, which ranked John Hancock as an equal to taxpayers, with DOE’s inability to reorder priority in case of a default, disables the ability of DOE to rely on its superiority as required under Section 1702(g)(2)(B).

4. *Nevada Geothermal’s Continuing Problems*

Since DOE finalized Nevada Geothermal’s loan guarantee in September 2010, the project continues to have operational and financial problems. The project has an ongoing problem with electrical fires. In January 2010 (before the loan guarantee), part of the Blue Mountain plant was damaged after electrical cables were placed too close together and burned; a significant amount of cable was destroyed and had to be replaced.<sup>294</sup> In October 2011, another fire occurred because the seal on one of the pumps failed, causing part of the plant to go offline for major repairs.<sup>295</sup> Operational problems at the Blue Mountain project resulted in revenue being less than estimated the last four months of 2011.<sup>296</sup> Additionally, in November 2011, one of Nevada Geothermal’s major creditors considered placing Nevada Geothermal in default because of a late payment,<sup>297</sup> and Nevada Geothermal lost \$3.9 million in the fourth quarter.<sup>298</sup>

**F. Granite Reliable**

In September 2011, Granite Reliable Power, LLC, a wind generation company owned by the Brookfield family of companies, received a partial guarantee for \$168.9 million loan from DOE.<sup>299</sup> The funds will finance Granite Reliable Power Windpark, a wind generation project in

---

<sup>292</sup> Nevada Geothermal Power, Inc., Conditional Loan Guarantee, U.S. Dep’t of Energy, Summary of Terms and Conditions at 8.

<sup>293</sup> *Id.* at 25-6.

<sup>294</sup> Email from Max Walenciak, Nevada Geothermal, to Brian Fairbank, Nevada Geothermal, Mar. 1, 2010 (on file with author).

<sup>295</sup> Email from Max Walenciak, Nevada Geothermal, to Thomas Pollog, DOE, Nov. 22, 2011 (on file with author).

<sup>296</sup> Operations Budget Reviews, Nevada Geothermal, Sept.-Dec. 2011 (on file with author).

<sup>297</sup> Email from Andrew Studley, Nevada Geothermal, Nov. 1, 2011 (on file with author).

<sup>298</sup> *Nevada Geothermal Power Reports Dec Quarter Results*, Nasdaq, Feb. 28, 2012, available at <http://community.nasdaq.com/News/2012-02/nevada-geothermal-power-reports-dec-quarter-results.aspx?storyid=123602>.

<sup>299</sup> DOE Loan Programs Office, Loan Guarantee Program Projects, available at <https://lpo.energy.gov/?projects=granite-reliable>.

Coos, New Hampshire.<sup>300</sup> Unlike other loan recipients, Granite Reliable was a very profitable company without any demonstrated need to obtain a loan subsidy in order to secure private financing.<sup>301</sup> A deeper look into the players and circumstances surrounding this decision suggest that politics may have led DOE to approve the loan.

Until 2011, Granite Reliable was owned and controlled by Noble Environmental Power, Inc. Noble sold that 75% interest to BAIF Granite Holdings, Inc., just prior to the project's loan approval in September 2011.<sup>302</sup> BAIF Granite Holdings (BAIF) was created by Brookfield Renewable Power, a subsidiary of the \$3.2 billion company Brookfield Asset Management (BAM).<sup>303</sup> Brookfield Renewable Power financed the creation of BAIF from its Brookfield Americas Infrastructure Fund, which reportedly has assets totaling \$2.7 billion.<sup>304</sup> The remaining minority interest is owned by Freshet Wind Energy, LLC, which partnered with BAIF on the project.<sup>305</sup> Given the solid financial background from which Granite Reliable was formed, it is unclear why DOE determined that the company needed a \$168.9 million loan guarantee.

# *1. Brookfield's Company Background: Board Members, Holdings, and Investors*

One reason DOE determined a loan guarantee may have been necessary may lie in the inner workings of the BAM family of companies and the companies' strong Democratic ties. BAM owns BAIF, which owns Granite Reliable, as well as Brookfield Office Properties (BOP). BOP's Board of Directors is chaired by John Zuccotti, the man for whom New York City's Zuccotti Park is named, and includes Diana Taylor, New York City Mayor Michael Bloomberg's long-time girlfriend.<sup>306</sup> George Soros and Martin J. Whitman, both prominent Democratic donors, are both heavily invested in Brookfield.<sup>307</sup> Moreover, Heather Podesta, sister-in-law of Obama's influential White House transition director John Podesta, and the Podesta Group served as the lobbyists for BAIF.<sup>308</sup>

<sup>300</sup> Press Release, *Department of Energy Finalizes Loan Guarantee of Nearly \$170 Million to Granite Reliable Power*, U.S. Dep't of Energy, available at <http://energy.gov/articles/departement-energy-finalizes-loan-guarantee-nearly-170-million-granite-reliable-power>.

<sup>301</sup> See Opinion, *A NH Solyndra? Wind Farm Gets Fed Loan*, UNION LEADER, Sept. 28, 2011.

<sup>302</sup> Press Release, *Noble Environmental Power Signs Agreement for the Sale of its Interest in its New Hampshire Wind Project*, Noble Power, Dec. 7, 2010, available at [http://www.noblepower.com/pressroom/documents/10-12-7\\_NEP-SignsAgreementForSaleOfNHWindProject\\_Final.pdf](http://www.noblepower.com/pressroom/documents/10-12-7_NEP-SignsAgreementForSaleOfNHWindProject_Final.pdf); Ehren Gossens, *Brookfield Picks RMT to Build New Hampshire's Largest Wind Farm*, Bloomberg, Feb. 12, 2010, available at <http://www.bloomberg.com/news/2011-02-23/brookfield-renewable-picks-rmt-to-build-new-hampshire-s-largest-wind-farm.html>.

<sup>303</sup> Opinion, *A NH Solyndra? Wind Farm Gets Fed Loan*, UNION LEADER, Sept. 28, 2011.

<sup>304</sup> *Id.*

<sup>305</sup> Granite Reliable Power Wind Project, Brookfield Renewable Power, available at [http://brookfieldrenewable.com/content/united\\_states/granite\\_reliable\\_power\\_wind\\_project-30823.html](http://brookfieldrenewable.com/content/united_states/granite_reliable_power_wind_project-30823.html) (last visited Mar. 15, 2012).

<sup>306</sup> Board of Directors, Brookfield Office Properties, available at [http://brookfieldofficeproperties.com/content/corporate\\_governance/board\\_of\\_directors-16350.html?Page=2](http://brookfieldofficeproperties.com/content/corporate_governance/board_of_directors-16350.html?Page=2) (last visited Mar. 15, 2012).

<sup>307</sup> Steve MacDonald, *NH Wind Farm Project Comes with Inside Deal Making?*, Oct. 15, 2011, available at <http://www.allrightmagazine.com/environment/nh-wind-farm-project-comes-with-inside-deal-making-11752/#more-11752>.

<sup>308</sup> Aaron Klein, *Look Whose Sister-in-law Just Secured \$135.8 Million Energy Loan*, Oct. 12, 2011, available at <http://kleinonline.wnd.com/2011/10/12/look-who%E2%80%99s-sister-in-law-just-secured-135-8-million-energy-loan-latest-%E2%80%98green%E2%80%99-company-with-deep-white-house-ties-to-get-massive-public-funds/>.

2. *Nancy Ann DeParle: Obama's Deputy Chief of Staff for Policy and Noble Interest Holder*

As described in Section V, Part B of this report, Nancy DeParle suffered a conflict of interest during her time in the Administration. As indicated on her financial disclosure forms, prior to joining the White House, Nancy DeParle was one of five managing directors of a multi-billion dollar private equity firm CCMP<sup>309</sup> While with CCMP, she sat on the board of directors for Noble Environmental Power, LLC, one of CCMP's investments.<sup>310</sup> She served as a board member of Noble for about two years and quit in March of 2009.<sup>311</sup> Noble owned Granite Reliable.

Coinciding with her tenure at the White House, DOE considered a loan guarantee for Granite Reliable. The Granite Reliable project was well underway by late 2009.<sup>312</sup> Noble then sold Granite Reliable in December 2010 to Brookfield Asset Management, just 6 months prior to the conditional approval of the DOE loan guarantee and deep into the application process.<sup>313</sup> The DOE loan guarantee was conditionally approved in June 2011 and finalized in September 2011.

The ultimate approval of the DOE loan guarantee that followed the sale of Granite Reliable is tainted by DeParle's position within the White House and her financial interest in Noble. DeParle's position in the Administration could have been used to influence the successful sale by ensuring or increasing the likelihood of ultimate approval of the DOE loan guarantee. The loan guarantee would increase the value of the Granite Reliable, improving the sale price and, thereby, improving the investment of DeParle's son.

**G. Record Hill Wind: DOE Uses the First Solar Precedent to Speed Through Another Questionably "Innovative" Technology**

DOE relied on the First Solar precedent to approve Record Hill Wind's \$102 million loan guarantee project as "innovative," despite the project using commercial technology. DOE knew that the Record Hill project did not use significantly innovative technology. The Standard & Poor's credit rating for the project that DOE received clearly indicates the commercial (and non-innovative) nature of the project:

Record Hill has entered into a Turbine Supply Agreement for the shipment of 22 Siemens 93SWT[Siemens Wind Turbine] 2.3MW wind

<sup>309</sup> CCMP Capital Advisors, LLP, *available at* <http://www.ccmcapital.com/> (last visited Mar. 15, 2012).

<sup>310</sup> See Noble Environmental Power, LLC, U.S. Securities and Exchange Commission, Form S-1, May 8, 2008, *available at* <http://www.nasdaq.com/markets/ipos/filing.ashx?filingid=5635802>.

<sup>311</sup> Company Overview of CCMP Capital Advisors, LLC, Bloomberg Businessweek, *available at* <http://investing.businessweek.com/research/stocks/private/person.asp?personId=1090061&privcapId=28674590&previousCapId=35644&previousTitle=DaVita%20Inc>.

<sup>312</sup> Federal Aviation Admin. Determination of No Hazard to Air Navigation, Nov. 18, 2009 (on file with author); Engineering, Procurement and Construction Agreement between RMT, Inc. and Granite Reliable Power, LLC, Apr. 26, 2010 (on file with author).

<sup>313</sup> Press Release, *Noble Environmental Power Signs Agreement for the Sale of its Interest in its New Hampshire Wind Project*, Noble Environmental Power, Dec. 7, 2010, *available at* [http://www.noblepower.com/pressroom/documents/10-12-7\\_NEP\\_SignsAgreementForSaleOfNHWindProject\\_Final.pdf](http://www.noblepower.com/pressroom/documents/10-12-7_NEP_SignsAgreementForSaleOfNHWindProject_Final.pdf).

turbines to be installed at the site. **The SWT-2.3-93 turbine has been in operation in Europe since 2005, and the first turbines in the US were installed and began operations in 2006. Currently, there are a total 1,374 SWT-2.3-93 turbines operating worldwide....**

...Due to harsh winter conditions in Maine, the project plans to install a cold weather package on all turbines, which will keep the turbines running in cold temperatures. **Siemens' cold weather packages are currently in use on turbines in Canada, Norway, and other cold areas,** and have performed to expectations. Along with a cold weather package, the project expects to make use of Siemens proprietary Turbine Load Control (TLC) technology...**Given that the technology is software-based, however, and is not considered a fundamental component in the performance of the turbine,** the TLC could be shuttered without damaging the turbine if it does not work properly. In this case, the turbines would continue to run similar to Siemens' existing fleet.<sup>314</sup> (emphasis added)

Much like First Solar's "innovative" projects, the Record Hill Wind project attempted to categorize minor modifications to existing commercial technology as "innovativeness." DOE eventually agreed with Record Hill Wind's questionable reasoning. On December 14, 2010, Todd Shrader of DOE sent an email to several DOE personnel with the subject line "Eligibility Interpretation (sic)" that read:

An eligibility issue arose during the technical evaluation of Ocotillo Express (FIPP—F1033). This project is utilizing Siemens SWG-2.3-101 wind turbine generators. It is claimed to be a commercial technology based on the wide spread use (including in this country) of the closely related Siemens SWG-2.3-93 turbines, which are essentially the same just with smaller blade lengths (101 feet vs. 93 feet). Without looking deeper into the design differences (which will occur at due diligence), I concur with the applicant that this is a commercial technology. However, for Record Hill, which is using SWG-2.3-93 turbines, it is claimed that this is a new and innovative technology, partially based on no use over 5 years in the US for these turbines. I also believe there were some differences in internal controls. **However, the 101 and 93 units are essentially the same technology. Can the same technology be innovative under the Renewables Solicitation and Commercial under the FIPP's solicitation?**<sup>315</sup> (emphasis added)

Later in the day, Ruth Ku of DOE replied that the same question had occurred before with a different project and that the "project was asked whether it could obtain alternative financing in the private market...the project was able to get alternative financing (e.g., with John Hancock) and I think the recommendation was for it to move its application to FIPP...don't know where Record Hill is in its process for it to be

<sup>314</sup> Record Hill Wind, LLC., Standard & Poors Credit Report, July 1, 2011 (on file with author).

<sup>315</sup> Email from Todd Shrader, U.S. Dep't of Energy, Dec. 14, 2010 (on file with author).



feasible for it to apply under FIPP at this point.”<sup>316</sup> Ruth Ku forwarded her email to Douglas Schultz, a Program Manager at DOE’s Loan Programs Office. Douglas Schultz replied, “Record hill is well into due diligence with [D]avid [S]chmitzer. No reason to transfer at all. In terms of precedent of innovative and not **look no further than first solar where there [sic] panels are both innovative and noninnovative given the inverter used.**”<sup>317</sup> (emphasis added)

Ruth Ku agreed with Douglas Schultz but worried that submitting two project applications using the same technology as innovative and not innovative could cause a “policy issue for OMB.” She wrote back to Douglas Schultz stating “[I]t cld [sic] be a policy issue for OMB if record hill followed Ocotillo. Think it’s probably less of an issue if record hill was first then Ocotillo.”<sup>318</sup> After scheming about how to get the two applications through OMB without problems, DOE allowed the Record Hill Wind project to continue as an “innovative” project.<sup>319</sup> DOE would eventually finalize a \$102 million loan guarantee (guaranteed 100% by the federal government) in August 2011.

#### **H. Genesis Solar: An Expedited Approval Process Now Threatens Entire Project**

On August 20, 2011, DOE awarded NextEra Energy Resources LLC (NextEra) a partial loan guarantee for \$825 million to fund the Genesis Solar Energy Project (Genesis). A planned 250-megawatt plant to lie on 1,950 acres of federal land located outside Blythe, California, Genesis plans to power more than 187,500 homes by 2014.<sup>320</sup> Standard & Poor’s gave NextEra a BBB+ rating, highly dependent on a long term Power Purchasing Agreement (PPA) with Pacific Gas & Electric (PG&E), and a Construction Completion Agreement with NECH, noting that if either’s credit ratings were downgraded in the interim, it would hurt Genesis’s rating as well.<sup>321</sup> S&P emphasizes that the loan guarantee would only support the project for up to a six month delay. Additional delays would restrict Genesis’s ability to meet the PPA and jeopardize the success of the project.<sup>322</sup>

An accelerated state and federal site approval process allowed the project to gain DOE approval, but the hasty work may now endanger the entire project. Genesis’s original site resided on a section of Ford Dry Lake, which archeologists suspected contained ancient cremation sites.<sup>323</sup> To minimize delays, NextEra moved the project two miles north to a new site, still on federal land. DOE’s application process requires extensive vetting of project sites for a variety of environmental factors. However, to expedite site approval, NextEra opted for a less thorough process developed by the state energy commission (The Commission) and the Bureau of Land Management (BLM) that would “streamline the time necessary to produce the

---

<sup>316</sup> Email from Ruth Ku, U.S. Dep’t of Energy, Dec. 14, 2010 (on file with author).

<sup>317</sup> Email from Douglas Schultz, U.S. Dep’t of Energy, Dec. 14, 2010 (on file with author).

<sup>318</sup> Email from Ruth Ku, U.S. Dep’t of Energy, Dec. 14, 2010 (on file with author).

<sup>319</sup> DOE did not finalize a loan guarantee for the Ocotillo Express project.

<sup>320</sup> Louis Sahagun, *Problems Cast Shadows of Doubt on Solar Project*, L.A. TIMES, Feb. 11, 2012, available at <http://articles.latimes.com/2012/feb/11/local/la-me-solar-foxes-20120211>.

<sup>321</sup> Genesis Solar LLC, Standard & Poor’s, July 21, 2011 ‘BBB+’ Rating (on file with author).

<sup>322</sup> *Id.*

<sup>323</sup> *Id.*

joint cultural resources analyses...foregoing potentially lengthy investigations to evaluate the historical significance of the cultural resources found.”<sup>324</sup>

The Commission did warn Genesis of the potential consequences associated with the site approval process in August 2011, stating, “This approach however has the real potential to result in...delays in construction start-up, increase in requisite construction monitoring, and cost.”<sup>325</sup> As part of the process, NextEra dug 500 test pits 3feet deep and found no artifacts, allowing them to proceed with construction.

After DOE granted final approval to the project and construction began, grading equipment unearthed grinding stones lying on a bed of charcoal, indicating possible evidence of human settlements. This discovery caused work to halt on 400 acres of the Genesis site while the company and regulatory agencies discuss various options. The hasty approval process that prevented the earlier discovery has compromised the construction schedule and put Genesis in serious jeopardy of not satisfying its obligations under the PPA. NextEra has admitted that these delays may have serious consequences for the project; according to a NextEra Senior Vice President, “the project could become uneconomical.”<sup>326</sup>

In addition to these problems, the new site also encroached on the habitat of the endangered Kit Foxes, native to the California desert. NextEra used “passive hazing” techniques approved by state and federal biologists to remove the foxes prior to site grading of the area. Essentially, NextEra sprayed coyote urine around dens and removed food sources. Two dead foxes were found on site in October 2011, which died from Distemper, a disease similar to Rabies spread by bodily fluids, never previously recorded in Kit Foxes. Ultimately, seven foxes died from NextEra’s removal process.

### **I. General Electric’s Broad Access to Loan Guarantees: Caithness Shepherds Flat, 1366 Technologies and Kansas City Southern Railway Company**

General Electric (GE) sponsored a project called Caithness Shepherds Flat (Caithness), and also supplied the project with 338 wind-turbines. High level Administration officials expressed concern that the project was receiving an excessive amount of public subsidy, and that private parties did not have sufficient “skin in the game.” In a Memorandum for the President (“Summers’ Memo”) dated October 25, 2010, Carol Browner, Ron Klan and Larry Summers revealed concerns regarding excessive over-subsidization of the Caithness project, where grants, tax credits and loan guarantees provided 65% of the funding for the project. Because of the excessive subsidy, the memorandum reveals expectations of a 30% return to the

---

<sup>324</sup> Letter from Mike Monasmith, Project Manager, California Energy Commission, to Scott Busa, Director, NextEra Energy Resources, LLC, Dec. 3, 2009, *available at* [http://www.energy.ca.gov/sitingcases/genesis\\_solar/documents/2009-12-03\\_New\\_Alternate\\_Approach\\_TN-54332.pdf](http://www.energy.ca.gov/sitingcases/genesis_solar/documents/2009-12-03_New_Alternate_Approach_TN-54332.pdf).

<sup>325</sup> *Id.*

<sup>326</sup> Louis Sahagun, *Problems Cast Shadows of Doubt on Solar Project*, L.A. TIMES, Feb. 11, 2012, *available at* <http://articles.latimes.com/2012/feb/11/local/la-me-solar-foxes-20120211>.

private investors generated on the backs of taxpayers.

#### Appendix: Shepherds Flat Loan Guarantee

The Shepherds Flat loan guarantee illustrates some of the economic and public policy issues raised by OMB and Treasury. Shepherds Flat is an 845-megawatt wind farm proposed for Oregon. This \$1.9 billion project would consist of 338 GE wind turbines manufactured in South Carolina and Florida and, upon completion; it would represent the largest wind farm in the country. The sponsor's equity is about 11% of the project costs, and would generate an estimated return on equity of 30%.

- Double dipping: The total government subsidies are about \$1.2 billion.

Subsidy Type	Approximate Amount (millions)
Federal 1603 grant (equal to 30% investment tax credit)	\$500
State tax credits	\$18
Accelerated depreciation on Federal and State taxes	\$200
Value of loan guarantee	\$300
Premium paid for power from state renewable electricity standard	\$220
Total	\$1,238

- Skin in the game: The government would provide a significant subsidy (65+%), while the sponsor would provide little skin in the game (equity about 10%).
- Non-incremental investment: This project would likely move without the loan guarantee. The economics are favorable for wind investment given tax credits and state renewable energy standards. GE signaled through Hill staff that it considered going to the private market for financing out of frustration with the review process. The return on equity is high (30%) because of tax credits, grants, and selling power at above-market rates, which suggests that the alternative of private financing would not make the project financially non-viable.
- Carbon reduction benefits: If this wind power displaced power generated from sources with the average California carbon intensity, it would result in about 18 million fewer tons of CO2 emissions through 2033. Carbon reductions would have to be valued at nearly \$130 per ton CO2 for the climate benefits to equal the subsidies (more than 6 times the primary estimate used by the government in evaluating rules).

Four months after DOE approved the Caithness loan, President Obama named Jeff Immelt, the CEO of GE, as the Chairman (Job Czar) of the President's Council on Jobs and Competitiveness (Jobs Council). As the Chairman of the Job Council, Immelt had direct access to President Obama.<sup>327</sup> Since Immelt's appointment as Job Czar, two additional GE related

<sup>327</sup> About the Council, President's Council on Jobs and Competitiveness, available at <http://www.whitehouse.gov/administration/advisory-boards/jobs-council/about> (Stating it shall, "Report directly to

government-backed transactions have occurred. First, the poorly rated 1366 Technologies, sponsored in part by GE,<sup>328</sup> received a direct \$150 million loan commitment from DOE for its solar manufacturing plant.<sup>329</sup> Second, on February 22, 2012, the Federal Railroad Administration (FRA) loaned \$54.6 million to Kansas City Southern Railway Company (KCSR) under the Federal Railroad Administration-administered Railroad Rehabilitation and Improvement Financing (RRIF) Program to purchase thirty new General Electric ES44AC diesel-electric locomotives.<sup>330</sup>

Regarding KCSR's purchase of GE locomotives, the railroad's filings with the Securities and Exchange Commission (SEC) reveal a twenty-five year, \$54.6 million loan at 2.96%.<sup>331</sup> KCSR received this loan despite reporting strong earnings. For the year 2011, KCSR reported operating income of \$612 million on \$2.1 billion in revenues, a 26% increase over the prior year – not the picture of a company in need of assistance in the form of a \$54.6 million loan.<sup>332</sup> As a result of this subsidized loan, the highly profitable KCSR gained a competitive advantage over its freight rail competitors.

## VII. Breakdown of Problems with ATVM Loans

Each of the “Big Three” auto manufacturers, Ford, General Motors, and Chrysler, along with Nissan, applied for loans under the ATVM Program. Ford and Nissan are the only major manufacturers that received an ATVM loan. The companies received \$5.9 billion and \$1.4 billion respectively.<sup>333</sup> Both General Motors and Chrysler withdrew their applications after waiting over a year for responses from DOE.<sup>334</sup> Initially, financial viability was the primary roadblock that kept GM and Chrysler out of the running for Department of Energy loans.<sup>335</sup> Some speculated that the entire program had been put on hold in order to give these two manufactures time to prove their financial viability and qualify for loans that would have drained

---

*the President on the design, implementation, and evaluation of policies to promote the growth of the American economy...”).*

<sup>328</sup> See Sustainable Business, *GE Backs 1366 Technologies*, Mar. 4, 2011, available at <http://www.matternetwork.com/2011/3/ge-backs-1366-technologies.cfm>.

<sup>329</sup> Press Release, *Energy Department Finalizes \$150 Million Loan Guarantee to 1366 Technologies that Could Drive Down Manufacturing Costs and Make American Solar More Competitive*, U.S. Dep't of Energy, Sept. 8, 2011, available at <http://energy.gov/articles/energy-department-finalizes-150-million-loan-guarantee-1366-technologies-could-drive-down>.

<sup>330</sup> William Vantuono, *RRIF Loan Will Finance 30 KCSR Locomotives* Railway Age, Feb. 22, 2012, available at <http://www.railwayage.com/index.php/mechanical/locomotives/rrif-loan-will-finance-30-kcsr-locomotives.html>.

<sup>331</sup> Kansas City Southern Railway Company, Form 8-K Report, Feb. 22, 2012 (on file with author)

<sup>332</sup> Kansas City Southern Railway Company, Form 8-K Report, Jan. 23, 2012 (on file with author).

<sup>333</sup> U.S. Dep't of Energy Loan Programs Office, Description of ATVM program, available at [https://lpo.energy.gov/?page\\_id=43](https://lpo.energy.gov/?page_id=43).

<sup>334</sup> Benson Kong, *GM Withdraws DOE Loan Application, Speeds Up Volt Production*, Motor Trend, Jan. 27, 2011, available at <http://wot.motortrend.com/gm-withdraws-doe-loan-application-speeds-volt-production-26459.html>; Press Release, *Chrysler Group Statement Regarding Department of Energy Advanced Technology Vehicles Manufacturing Loan Application*, Feb. 16, 2012, available at <http://www.wkrm.com/story/16953247/chrysler-group-statement-regarding-department-of-energy-advanced-technology-vehicles-manufacturing-loan-application>.

<sup>335</sup> Josie Garthwaite, *GM, Chrysler's Green Car Loan Bids Inch Forward, Face Upstart Competition*, May 14, 2012, available at <http://gigaom.com/cleantech/gm-chryslers-green-car-loan-bids-inch-forward-face-upstart-competition/>.

the program of remaining funds.<sup>336</sup> In the end, both companies withdrew their applications, choosing instead to seek private financing. The other loan recipients are Fisker, Tesla, and The Vehicle Production Group, receiving \$529 million, \$465 million, and \$50 million, respectively.<sup>337</sup> To date, the ATVM Program has loaned \$8.339 billion to five auto manufacturers for the production of ATVs.

It is unclear whether DOE has a set of objective standards by which it judges the relative merit of applicants. Based on materials obtained by the Committee, it appears that DOE applies inconsistent standards to each applicant, leaving innovative car companies in a state of perpetual uncertainty over how they will be treated under the process. These concerns are apparently shared by Senator Diane Feinstein, who wrote DOE complaining that, “On multiple occasions, the department has missed internal deadlines for initial decisions, term negotiations, final decisions and loan closure.”<sup>338</sup> This haphazard administration of the ATVM Program creates confusion in the advanced technology vehicle market and may have actually hurt President Obama’s goal of fostering a new generation of vehicles.<sup>339</sup>

Despite an apparent lack of discernible objective criteria to judge the relative merit of loan applicants, it does appear that ties to the Obama Administration were important for those companies securing an ATVM loan early on in the process. Both Ford Motor Co. and Nissan were heavily engaged in negotiations with the Administration over fuel economy standards for model years 2012- 2016 at the time DOE was considering their applications.<sup>340</sup> Both companies eventually expressed publically their support for these standards, which the Administration described as the “Historic Agreement.”<sup>341</sup> In addition to this curious timing associated with the approval of Ford and Nissan’s loan, the other recipients each enjoyed close ties to the Administration. For example, Fisker was backed by Kleiner, Perkins, Caufield & Byers, which has significant ties to the Administration.<sup>342</sup> One of the senior partners at Kliner Perkins is former Vice President Al Gore. Another partner, John Doerr, serves on Obama’s Council on Jobs and Competitiveness.<sup>343</sup> In the case of Tesla, board member Steve Westly was a major Obama campaign bundler and a frontrunner for the position of Secretary of Energy.<sup>344</sup>

<sup>336</sup> Edward Niedermeyer, *GM Withdraws \$14.4b Government Loan Request*, Jan. 27, 2011, available at <http://www.thetruthaboutcars.com/2011/01/gm-withdraws-14-4b-government-loan-request/>.

<sup>337</sup> U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, available at [https://lpo.energy.gov/?page\\_id=43](https://lpo.energy.gov/?page_id=43).

<sup>338</sup> Edward Niedermeyer, *Government Retooling Loans: On Hold for Gm and Chrysler?*, Jan. 24, 2011, available at <http://www.thetruthaboutcars.com/2011/01/government-retooling-loans-on-hold-for-gm-and-chrysler/>.

<sup>339</sup> Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, Feb. 28, 2012.

<sup>340</sup> Mike Allen & Eamon Javers, *Obama Announces New Fuel Standards*, POLITICO, May 18, 2009, available at <http://www.politico.com/news/stories/0509/22650.html>.

<sup>341</sup> *Id.*

<sup>342</sup> Al Gore Investment Partner, available at <http://www.kpcb.com/partner/al-gore> (last visited Mar. 15, 2012).

<sup>343</sup> President’s Council on Jobs and Competitiveness, available at <http://www.whitehouse.gov/administration/advisory-boards/jobs-council/members/doerr> (last visited Mar. 15, 2012).

<sup>344</sup> Lindsay Riddell, *Westly ‘Honored to be Considered’ for Obama Cabinet*, Sacramento Bus. J., Nov, 13, 2008, available at <http://www.bizjournals.com/sacramento/stories/2008/11/10/daily62.html>; Ronnie Greene, et al., *Energy’s Risky \$1 Billion Bet on Two Politically-connected Electric Car Builders*, iWatch News, available at <http://www.iwatchnews.org/2011/10/20/7152/energys-risky-1-billion-bet-two-politically-connected-electric-car-builders>.

## Case Studies:

There has been very little activity in the ATVM loan program over the last three years, as DOE has only approved one loan since April 2010. Moreover, the Committee has yet to receive a response from DOE to its February 10, 2012, letter asking for additional information about the loan application process. Even so, the Committee has gleaned some information about the companies that DOE has considered for ATVM loans. These stories reveal the haphazard manner in which DOE is administering the program and how ever-changing goal posts and broken promises have promoted the misallocation of scarce resources and pushed some innovative companies into bankruptcy.

### *Aptera*

Aptera first applied for an ATVM loan in December 2008, looking for money to fund the production of the Aptera 2e, a three-wheeled vehicle capable of nearly 200 miles per gallon.<sup>345</sup> Although DOE rejected Aptera's original application for a loan because a three-wheeled vehicle did not meet the criteria of a Section 136 loan, Congress amended the program in October 2009, and Aptera resubmitted its application in January 2010 for both the 2e and a four-wheeled vehicle.<sup>346</sup> By late 2010, DOE determined that the 2e would not be able to pay back capital costs.<sup>347</sup> Accordingly, Aptera shifted its focus to the 4e, a four door electric sedan, that DOE believed would be more suited to an ATVM loan program.<sup>348</sup> After numerous negotiations with DOE, in September 2011, Aptera received a letter from DOE offering them a conditional loan commitment of \$150 million if the company was able to raise \$80 million privately.<sup>349</sup>

Aptera shut down on December 2, 2011, citing the inability to raise additional private capital, having exhausted a bridge loan that was supposed to last through the time DOE made a final decision on the loan.<sup>350</sup> At this point, Aptera's investors had funneled \$40 million of their own money into the project. Former Aptera CEO Paul Wilbur and former marketing Vice President Marques McCammon have publically asserted that the prolonged timeframe spent engaging with DOE to secure a loan ultimately consumed their cash reserves.<sup>351</sup> Wilbur stated that a "bright shiny object disease" characterized the ATVM Program and suggested in retrospect, "We should have raised the money ourselves rather than relying on DOE."<sup>352</sup> However, the loans given to Fisker and Tesla gave Aptera hope that DOE would eventually act on their application. More importantly, since the DOE continued to engage with the company

---

<sup>345</sup> John Voelcker, *Aptera Collapse: How & Why It Happened, A Complete Chronology*, Dec. 12, 2011, available at [http://www.greencarreports.com/news/1070490\\_aptera-collapse-how-why-it-happened-a-complete-chronology](http://www.greencarreports.com/news/1070490_aptera-collapse-how-why-it-happened-a-complete-chronology); Basem Wasef, *Aptera Unveils 200-mpg 2E Prototype*, Popular Mechanics, Apr. 12, 2010, available at <http://www.popularmechanics.com/cars/news/preview-concept/aptera-200-mpg-2e-prototype>.

<sup>346</sup> John Voelcker, *Aptera Collapse: How & Why It Happened, A Complete Chronology*, Dec. 12, 2011, available at [http://www.greencarreports.com/news/1070490\\_aptera-collapse-how-why-it-happened-a-complete-chronology](http://www.greencarreports.com/news/1070490_aptera-collapse-how-why-it-happened-a-complete-chronology).

<sup>347</sup> *Id.*

<sup>348</sup> *Id.*

<sup>349</sup> *Id.*

<sup>350</sup> *Id.*

<sup>351</sup> *Id.*

<sup>352</sup> *Id.*

throughout the time period, management was convinced that DOE was interested and willing to provide financing for the company.<sup>353</sup>

### *Bright Automotive*

Bright Automotive was an Indiana company that developed a plug-in hybrid delivery vehicle that it planned to market to fleet customers.<sup>354</sup> On February 28, 2012, Bright sent DOE a scathing letter announcing that they “have been forced to say uncle” and that it would withdraw from the ATVM application process.<sup>355</sup>

Bright applied for an ATVM Loan in December 2008 and its application was deemed “substantially complete” at that time.<sup>356</sup> DOE continued to review the application for an additional 1,175 days.<sup>357</sup> According to the company, Bright secured letters of support sent to Secretary Chu from large fleet vehicle users such as Cox, Comcast, and Bust Buy, and had order letters from Duke, Vectren, and Snap On.<sup>358</sup>

According to documents obtained by the Committee, on March 2, 2012, Lachlan Seward, then the Director of the ATVM Program, indicated to Bright that a loan for less than \$300 million would be quickly approved.<sup>359</sup> In DOE’s next communication, DOE suggested that Bright partner with a large OEM in order to speed up the loan process, intimating that conditional approval would occur in “weeks, not months.”<sup>360</sup> Pursuant to this advice, Bright entered into a strategic partnership with GM in July 2010.<sup>361</sup> At that time, DOE officials informed Bright that they would receive a conditional loan agreement within two months.<sup>362</sup> Two months later, DOE came back to Bright and directed the company to satisfy six additional loan pre-conditions.<sup>363</sup> By January 2011, Bright received a “near final” conditional agreement for a \$314 million loan.<sup>364</sup> It was reviewed by the DOE credit team for five months when on May 18, 2011, DOE determined that it would not consider Bright’s loan based on a volume consideration report generated by DOE, one that Bright had asked DOE to reassess.<sup>365</sup> DOE contractors, A.T. Kierney, conducted a new volume study, which led to Bright’s reconsideration for a loan by DOE in June 2011.<sup>366</sup> DOE once again assured Bright that just as soon as the company’s credit package went through the interagency process, it would receive an offer of

---

<sup>353</sup> *Id.*

<sup>354</sup> Jim Motavalli, Citing Onerous Energy Dept. Loan Terms, Bright Automotive Says it Will Close, N.Y. TIMES blog, Feb. 29, 2012.

<sup>355</sup> Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, Feb. 28, 2012 (on file with author).

<sup>356</sup> Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, et. al. Dec. 27, 2011 (on file with author).

<sup>357</sup> Jim Motavalli, Citing Onerous Energy Dept. Loan Terms, Bright Automotive Says it Will Close, N.Y. TIMES Autoblog, Feb. 29, 2012.

<sup>358</sup> Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, et. al. Dec. 27, 2011 (on file with author).

<sup>359</sup> *Id.*

<sup>360</sup> *Id.*

<sup>361</sup> *Id.*

<sup>362</sup> *Id.*

<sup>363</sup> *Id.*

<sup>364</sup> *Id.*

<sup>365</sup> *Id.*

<sup>366</sup> *Id.*

conditional agreement no later than October 2011.<sup>367</sup> However, instead of an agreement, in October 2011, DOE told Bright to raise additional equity and perform other financial changes to bolster its balance sheet and credit.<sup>368</sup> This last demand caused Bright to withdrawal from the ATVM loan process.<sup>369</sup> In February 2012, the company closed down.

In their letter to the DOE, Bright's CEO Rueben Munger and COO Mike Donoughe flatly stated that the ATVM process distorted the U.S. private equity markets, effectively making DOE the only way for ATV companies to receive funding. According to Munger and Donoughe, DOE then used this position to submit the applicants to the control and "whim" of government bureaucrats.<sup>370</sup> As the letter points out, the ATVM program, as DOE is administering it, contravenes the purpose of the program because it stymies rather than advances technology within the automotive market. After spending millions of dollars to comply with DOE's endless finish line and consuming nearly three years of time, Bright withdrew its application from the ATVM Program, closing the company and its idea.

### *Severstal*

While DOE was stringing along potentially innovative auto manufacturers, they were working to approve a conditional loan agreement for a business that did not appear to qualify at all for the ATVM Program. In June 2011, DOE conditionally approved a \$730 million loan to steel company Severstal North America, a subsidiary of OAO Severstal, and a multibillion-dollar Russian steel and mining corporation. The ATVM loan would have financed Severstal's expansion and re-equipment of a Dearborn, Michigan, steel plant, located within Ford's manufacturing campus, to produce advanced high strength steel (AHSS). Chairman Issa challenged the appropriateness of this loan for several reasons: Severstal applied for a loan to produce AHSS, a material, not a "component part" as required under Section 136;<sup>371</sup> and it did not appear that the company needed public funding to "bring its product to market" as it was a subsidiary of a multi-billion dollar Russian corporation. Moreover, Severstal had already made significant strides towards completing the Dearborn project through private financing, even before receiving any money from DOE.<sup>372</sup> In its initial response to the Committee, DOE defended its due diligence and decision-making on the Severstal loan, touting the market strength of the company's product.<sup>373</sup>

On January 6, 2012, DOE reversed its position and denied Severstal's loan. When asked why it has changed its mind, DOE informed Committee staff, "We [DOE] could not get

---

<sup>367</sup> *Id.*

<sup>368</sup> *Id.*

<sup>369</sup> Jim Motavalli, Citing Onerous Energy Dept. Loan Terms, Bright Automotive Says it Will Close, N.Y. TIMES Autoblog, Feb. 29, 2012.

<sup>370</sup> Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, Feb. 28, 2012 (on file with author).

<sup>371</sup> Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

<sup>372</sup> Press Release, *Severstal North America Completes Asset Sale and Accelerates Capital Improvements*, Severstal North America, Mar. 31, 2011.

<sup>373</sup> Letter from David G. Frantz, Acting Executive Director Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Committee on Oversight and Gov't Reform, Nov. 18, 2011 (on file with author).



comfortable with apparent discrepancies and potential of fluctuation in steel prices,” and therefore would not offer the loan to Severstal.<sup>374</sup>

This explanation is curious, as DOE offered the conditional loan agreement based on a forecasted increase in market demand for AHSS.<sup>375</sup> DOE had originally projected Severstal to be the market leader in domestic AHSS production, even as other companies entered the American AHSS market.<sup>376</sup> DOE decided not to give a final loan to Severstal and, in so doing, questioned the company’s ability to repay the loan. Based on the apparent contradiction between DOE’s analyses, it is obvious that DOE has no clearly established standard it uses to evaluate ATVM loan applicants.

### *Fisker*

One of DOE’s original loans has been suffering severe setbacks in production, and many have predicted its eventual collapse.<sup>377</sup> In April 2010, DOE issued an ATVM loan of nearly half a billion dollars to Fisker. DOE froze the loan in February 2012, halting the issuance of any further money, because the company failed to meet DOE’s benchmarks. Fisker’s woes began with regulatory issues and delays in production of the Karma, Fisker’s \$100,000 luxury sedan. Fisker has since engaged DOE to renegotiate its loan agreement and renegotiate benchmarks.<sup>378</sup> Due to the financial troubles, including DOE’s freezing of the loan, Fisker has laid off 23 employees from its Delaware manufacturing plant<sup>379</sup> and 40 employees and contractors in its California plant.<sup>380</sup> In addition, Fisker recently announced that it was replacing founding CEO Henrik Fisker with Tom LaSorda, a former executive at both Chrysler and GM.<sup>381</sup> Furthermore, the Fisker Karma that *Consumer Reports* purchased to review broke down after less than 200 miles of operation and had to be towed 100 miles back to the dealer because the car would not even start.<sup>382</sup> Based on this reshuffling and DOE’s actions, Fisker appears to be a volatile company with a questionable future. Fisker’s current problems raise serious questions about DOE’s decision-making and an inconsistent standard in the ATVM Program.

### **ATVM Conclusion**

DOE mismanagement of the ATVM Loan Program has put potentially viable companies out of business and caused major setbacks within the ATV market. DOE has only succeeded in

---

<sup>374</sup> Interview with David G. Frantz, Acting Director ATVM Program, Jan. 13, 2012.

<sup>375</sup> U.S. Dept. of Energy, ATVM Loan Evaluation – Severstal Dearborn Market Analysis, Mar. 22, 2010 (on file with author).

<sup>376</sup> *Id.*

<sup>377</sup> Eric Ruth, et al., *Can Fisker Keep its Promise?*, Delaware Online, Feb. 13, 2012, available at <http://www.delawareonline.com/article/20120213/BUSINESS09/302130001/Can-Fisker-keep-its-promise->.

<sup>378</sup> Matthew Mosk, *Another Green Energy Company Stumbles: Fisker Announces Layoffs*, Feb. 6, 2012, available at <http://abcnews.go.com/Blotter/fisker-automotive-announced-layoffs/story?id=15524021>.

<sup>379</sup> *Id.*

<sup>380</sup> Associated Press, *Fisker Announces Layoffs as Automaker Misses Targets, has DOE Loans Frozen*, Feb. 7, 2012, available at <http://www.foxnews.com/leisure/2012/02/07/fisker-announces-layoffs-as-company-misses-targets-has-doe-loans-frozen/>.

<sup>381</sup> Dana Hull, *Fisker Automotive Replaces CEO with Auto Industry Veteran*, Mercury News, Feb. 28, 2012, available at [http://www.mercurynews.com/business/ci\\_20062262](http://www.mercurynews.com/business/ci_20062262).

<sup>382</sup> Tom Mutchler, *Bad Karma: Our Fisker Karma Plug-in Hybrid Breaks Down*, CONSUMER REPORTS, Mar. 8, 2012, available at <http://news.consumerreports.org/cars/2012/03/video-bad-karma-our-fisker-karma-plug-in-hybrid-breaks-down.html>.

giving billions of dollars to two large auto manufacturers and to companies with strong political connections to the Obama Administration. However, hundreds of other companies wait in DOE's loan queue. At least two of these companies have declared bankruptcy after engaging with DOE for a number of years, believing, based on representations from the Department, that they would eventually receive a government loan. Meanwhile, DOE conditionally approved a loan for a company that did not meet threshold requirement to be in the program. DOE's haphazard and inconsistent administration of the loan program has created significant uncertainty within the advanced vehicle manufacturing community and has potentially retarded progress on the next generation of automotive technologies.

## **Conclusion**

The findings regarding the DOE loan programs discussed in this report tell only part of a much greater story—a story of mismanagement, waste and abuse symptomatic of reaching too far, working too fast, and spending too much to achieve unrealistic objectives. There are significant concerns about DOE's management and administration of the weatherization, 1705, and ATVM programs. And a management structure unprepared and incapable of dealing with the challenges it faced when pressed to push out the door tens of billions of dollars in a short period of time. In the days ahead, the Committee will continue its investigation and examine DOE's record on a loan-by-loan basis, with the continued hope that spotlighting these shortcomings will provide Congress and the American people with the insight they need to assess the true value—or cost—of these types of programs.

## CIA/DIA/NSA FACT REPORTS- PUBLIC DATA

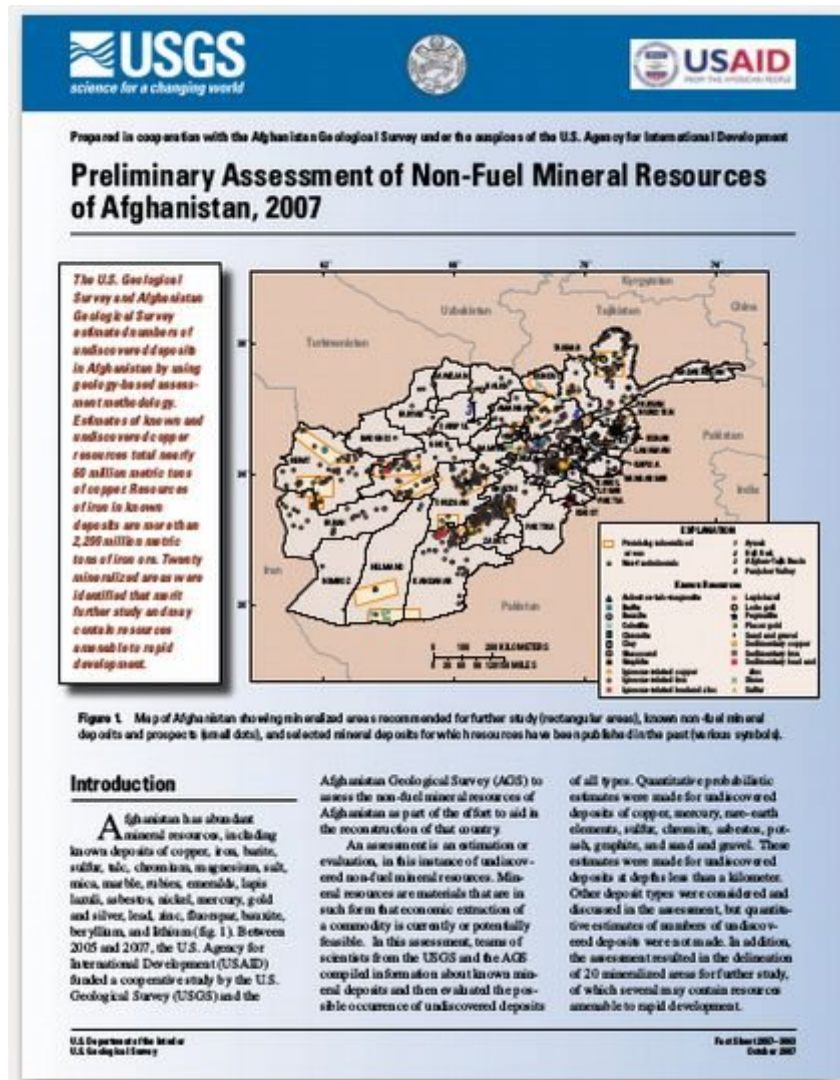
### THE AFGHAN SPY PAPERS ON AFGHANISTAN ELECTRIC CAR LITHIUM

#### - The Scam That That Blew Itself up

The Afghan War has been called “Obama’s War”. Recent leaked documents prove this to be so in more ways than one.

While many internet sites make numerous claims about conspiracies and corruption in the Afghan War, the following documents are from the highest level intelligence experts in the world. These documents prove the following:

1.) The USAID promoted the following report:



2.) This report was “creatively interpreted” by Chicago campaign operatives for the Obama campaign as meaning that “...there were trillions of dollars of lithium for electric cars sitting around in Afghanistan...” Afghan ministers then said there was over “\$7 Trillion dollars of lithium” laying around.

3.) Chicago Obama campaign operatives contacted Elon Musk, John Doerr, Eric Schmidt, Steve Jurvetson, Larry Page and other Silicon Valley oligarchs and promised them an exclusive opportunity to exploit this lithium if they helped put Barack Obama in the White House.

4.) The quid-pro-quo crony deal was agreed to and Silicon Valley was allowed to place their friends in charge of the Department of Energy to use the DOE as a slush-fund for those financiers.

5.) Steven Chu and his Silicon Valley henchmen cut off all technologies that competed with their lithium scam (ie: Fuel cells, hydrogen, ultra-capacitors, beta-voltaics, nickle metal hydrid, lead acid, etc.)

6.) It was then discovered that the lithium did not exist in those amounts, had no functional mining infrastructure, exploded on its own when processed into batteries, blew up when it got wet in batteries, blew up when it got bumped or exposed to air in batteries, blew up when overcharged in batteries, killed the workers making it, caused 6+ deadly health problems and was a threat to U.S. security.

7.) Russian intelligence officers now confess that the “massive lithium fields” may have been a joke they played on the Americans via manipulated geotech maps the Russians left in Kabul when they evacuated the country.

### **Editorial Says US Mulling Ways To Take Advantage of Afghan Minerals**

Editorial: “Afghan mineral deposits” - The Nation Online

Wednesday June 16, 2010 22:52:17 GMT

THE discovery of mineral deposits in Afghanistan might pull that country out of poverty. The discovery was made by a team of American geologists and Pentagon officials, with about \$1 trillion estimated as the value of the various minerals as being in the ground at present. According to the State Department spokesman making the announcement, the Department, USAID, the Commerce Department, the Geological Survey and the Pentagon, were working with Afghan experts to explore the minerals. The deposits include iron, copper, cobalt, gold and lithium. Lithium is used in manufacturing batteries for mobile phones and laptop computers, and a Pentagon memo has said that Afghanistan could become the Saudi Arabia of lithium. As if lithium was insufficient, the deposits also include niobium, a soft metal used in making superconducting steel, and large gold deposits.

The Geological Survey's aerial surveys, which started in 2006, were based on data collected by the Soviets during their 1980s occupation of the country. Promising results led to a more sophisticated survey the following year. The discovery, according to the State Department, has the potential to give Afghanistan the resources needed to have a modern and

legal economy, as opposed to the present narco-economy. This discovery might be good news for Afghanistan, but there are a certain number of implications that need to be kept in mind. First, it might be remembered that just as the original Soviet data led nowhere, so this discovery too may not lead to commercial exploitation. Already, the US State Department spokesman has predicted that it will be years before revenue can be expected. Second, and probably more serious for the ordinary Afghan, is the decrease in the likelihood of the USA going ahead with its planned withdrawal next year. It went into Afghanistan because it hoped to secure routes to the oilfields of Central Asia, but it will probably stay to exploit the mineral resources there. This merely provides an additional reason to remain there.

The Afghan people should not be too happy that lithium has been discovered in such large quantities, because they can rest assured of only one thing. Indians, already in Afghanistan at the invitation of the Karzai regime, will be wondering how to turn this development to their advantage. They will be encouraged by the USA, which will see an opportunity to throw some scraps towards the country it wishes to prop up as a counterweight to China. Americans must be busy working out ways to take advantage of the lithium deposits discovered, and until they suck them out, they will not exit the country and leave it alone.

(Description of Source: Islamabad The Nation Online in English -- Website of a conservative daily, part of the Nawa-i-Waqt publishing group. Circulation around 20,000; URL: <http://www.nation.com.pk>)

Material in the World News Connection is generally copyrighted by the source cited. Permission for use must be obtained from the copyright holder. Inquiries regarding use may be directed to NTIS, US Dept. of Commerce.

### **Article Discusses Outcome of Recently Held Pakistan-European Summit in Brussels**

Article by Sadaf Arshad: "Green lobsters, democracy and EU-Pak relations"  
- The News Online

Wednesday June 16, 2010 22:48:10 GMT

The joint statement following the second EU-Pakistan Summit in Brussels attended by Prime Minister Yousuf Raza Gilani was full of diplomatic niceties, signifying little. But that is hardly surprising.

The EU wants Pakistan to focus on eliminating the sources of terrorism and it acknowledged "the great sacrifices being made by the people and the security forces of Pakistan". However, the EU isn't prepared to commit greater number of men and more military materials to the war against the Taliban in Afghanistan and Waziristan.

Pakistan wants the EU to give it greater access to its markets. But it is

not able to diversify its textile exports or improve the quality of its food and fish products to comply with the EU health standards. Pakistan is 45th in line among the EU's 200 trading partners. But its contribution is just 0.3 per cent of the total EU trade, despite the fact that the EU does not charge Pakistan full duty rates - a concession the EU gives to boost trade with this conflict-ridden country.

"We are stuck," one EU official commented on the 2007 ban on fish products from Pakistan on the grounds that the popular green lobsters were packaged for export in unhygienic conditions. When the EU sent food inspectors to Pakistan, the government was so irked that it responded by temporarily withdrawing their visa facilities. The ban is still in place and the Pakistan government has done nothing to improve and regulate the export environment of the fishing industry.

Textile exports is the other major issue. One official said the solution for Pakistan is to "diversify" because the competition is tough. Also, there is the problem of relatively poor EU member states such as Portugal, Greece and Italy which are competing for the same home market as Pakistan in textiles. Needless to say, India has adjusted to the new market needs and is now producing mobiles, cars, software, and films for export to the EU. It ranks as the EU's 7th top trading partner with over 50 billion euros in trade every year. When Pakistan demanded a zero per cent import duty regime like the one allowed to Bangladesh and Afghanistan, it was told that it was not "such an underdeveloped country". On the other hand, Sri Lanka enjoys a Generalised System of Preferences (GSP) Plus because it has signed all the required international treaties and conventions, unlike Pakistan whose case will be considered in 2013 when the FTA is reviewed.

The EU is also part of the Friends of Democratic Pakistan (FoDP) network. But it hasn't coughed up any significant amounts of money to help revive Pakistan's economy whose slump is among the causes of increasing alienation and anger among the unemployed youth of the country. This is mainly because the EU (and the Euro) is in an acute financial crisis itself following the collapsing economies of Greece, Spain, and Portugal owing to irresponsible fiscal spending. Therefore, one should not expect too much of the next meeting of the FoDP which will be held in Brussels in August this year.

Under the circumstances, talk of strengthening the "strategic dialogue" for peace and development through a five year engagement plan to be drawn up in due course may turn out to be a lot of hot air.

Still, there is some good news. The EU remains committed to the Malakand Development Programme and Pakistan welcomed the launch of an EU 'Civilian Capacity Building for Law Enforcement' programme to support the government's counter-terrorism efforts. This programme aims at capacity building in the field of civil law enforcement by supporting the newly established National Counter-Terrorism Authority (NACTA) under former FIA

boss Tariq Pervez in the PM's secretariat in Islamabad in becoming a fully operational and effective agency. It further supports Pakistan's authorities in the development of provincial capabilities, by working on law enforcement and criminal justice.

**Minister says Afghanistan to invite bids for mineral extraction - Pajhwok**

Afghan News

Wednesday June 16, 2010 11:26:11 GMT

Text of report in English by Afghan independent Pajhwok news agency websiteKabul: Afghanistan will invite 200 international companies to bid for the extraction of its one trillion dollars worth of minerals, the country's mines minister reportedly said.The country will hold a road show in London on 25 June to attract investors, Wahidollah Shahrani said in New Delhi where he was meeting with his Indian counterpart, B. K Handique, on Tuesday (15 June)."We will invite bids for the development of our mineral deposits in the next few months," he told the Dow Jones Newswires.A number of Indian companies and global miners have already shown interest in Afghanistan's deposits, the minister said."To start with, we will invite bids for iron ore and copper mines," Shahrani added.A recent study by US geologists found Afghanistan had about one trillion dollars in untapped mineral wealth, including lithium, iron, gold, niobium, mercury and cobalt.Afghan President Hamed Karzai said in January that the deposits could help one of the world's most impoverished nations become one of the richest.(Description of Source: Kabul Pajhwok Afghan News in English -- independent news agency)

**Two international CIA soldiers die in north Afghanistan clash with Taliban -**

Afghan Islamic Press

Wednesday June 16, 2010 11:42:25 GMT

Text of report by private Pakistan-based Afghan Islamic Press news agencyKonduz, 16 June: Two ISAF soldiers have been killed and three others injured in a fighting. Two ISAF soldiers were killed and three others injured and one vehicle destroyed in the fighting between the Taliban and foreign forces in the Gortepa area on the suburbs of Konduz City, the capital of Konduz Province (in northern Afghanistan).The PRT (provincial reconstruction team) forces' press office in Konduz Province told the Afghan Islamic Press (AIP) that ISAF and local forces launched an operation against the Taliban in the Gortepa area this morning. Two ISAF soldiers were killed and three others injured, and one vehicle was destroyed as a result of the fighting. He said that the fighting was continuing.The press office gave no details about the casualties inflicted on the Taliban, but the governor of Konduz Province, Mohammad Omar, reported bombardment in that area and told AIP that 12 armed Taliban, including two Taliban commanders, Qari Abdol Latif and Taleb Shah, had been killed.Meanwhile, the residents of Gortepa told AIP that the foreign forces' bombardment had inflicted casualties on civilians as well. They said that exact information about civilian casualties was not available.Earlier, a Taliban spokesman, Zabihollah Mojahed, told AIP that

the fighting started at 1000 this morning (0430 gmt) at a time when the Taliban attacked a joint forces convoy in Bacha Qalandar area near Gortepa. The Taliban spokesman claimed that four armoured vehicles of foreign forces had been destroyed and the troops inside the vehicles suffered casualties, but he gave no information about the Taliban casualties.

-- **La Paz La Razon reports** that MAS Senator Fidel Surco said yesterday that social movements would evaluate United Nations Development Program (UNDP) staff to ensure that they were not meddling in internal politics. After meeting with UN representative Yuriko Yosukawa yesterday, Surco said that any U NDP personnel receiving a negative evaluation from the local community would be replaced. Government: Afghan Lithium Reports Aim To Justify US Presence

-- **Bolivian Government News Agency (ABI)** reports that Hector Cordova, deputy mining production development minister, said yesterday that two Finnish companies want to participate in the scientific committee formed to study the potential of lithium reserves in the Uyuni Salt Flat. The committee already has representatives from Japan, South Korea, Brazil, and France. In a related item, ABI reports that Luis Alberto Echazu, manager of the Bolivian Mining Corporation's Evaporite Resources Industrialization Project, confirmed yesterday that Bolivia has the largest confirmed lithium reserves in the world. In response to news about a recent lithium find in Afghanistan, Echazu said the reports have "a political overtone to justify the continued presence of the United States in Afghan territory." (La Paz Agencia Boliviana de Informacion in Spanish -- Website of government-owned news agency; URL:

<http://abi.bo/> <http://abi.bo/> ) Cuevas cartoon in

**La Razon depicts an Uncle Sam figure carrying "Afghanistan" saying: "I swear I did not know anything about the lithium."** Government Reaches Agreement With Guarani Assembly, Weakens CIDOB Protest

**Afghan President Karzai To Face 'Tough Questions' During Japan Trip - AFP**  
Wednesday June 16, 2 010 06:31:13 GMT  
tough questions over governance and corruption from one of his country's major aid donors when he arrives in Japan on Wednesday for a five-day visit.

Japan last year pledged up to five billion dollars in aid over five years until 2013, provided the security situation allows projects to go ahead and contingent on guarantees the assistance will not be lost to graft. It will be Karzai's fourth trip to Japan, and his first since he won his second presidential term last November in elections widely criticised as marred by ballot-stuffing and vote-rigging. Talks with Japan's new Prime Minister Naoto Kan and Foreign Minister Katsuya Okada will focus on improvement of security and the wider development of the war-torn and



dirt-poor central Asian nation."The quality of governance needs to be improved," Japanese foreign ministry press secretary Kazuo Kodama told AFP before the visit."We do have sympathy for his challenges, but at the same time, in order for his government... to really succeed in addressing all these challenges, he has got to put his government in order," Kodama said."So I think Prime Minister Kan and Foreign Minister Okada will certainly look forward to discussing these issues in a candid, straight-forward manner."Kabul said Karzai was travelling with his foreign and finance ministers, as well as national security advisor Rangeen Dadfar Spanta.Japan, whose military is restricted by a post-World War II pacifist constitution, has not deployed troops to Afghanistan, but the world's second biggest economy is one of the biggest donors to the country.Japanese aid has built 650 kilometres (400 miles) of highway and a new Kabul airport terminal, and its city planners are working to redevelop the capital, where more than 100 Japanese buses are now providing public transport.Of the aid package pledged last year, about 980 million dollars have been disbursed, including more than 300 million dollars to pay the wages of Afghanistan's 80,000 police officers, Japanese officials say.Other Japanese aid projects in the works are vocational training and small-scale rural aid projects that would help former Taliban foot-soldiers drop their arms and earn a living in civil society.Massive graft, however, threatens to undermine many international aid projects. Watchdog Transparency International says Afghanistan has the worst corruption of any country except Somalia, which has no functional government.Kodama said that Japan's foreign minister had repeatedly stressed that "this money comes from our taxpayers' pockets, and the government needs to be accountable for the way their money will have been spent. Money must be spent in an efficient and effective manner to meet the declared objectives."Karzai's visit comes days after US officials said Afghanistan has mineral deposits worth at least one trillion dollars, including iron, copper, cobalt, gold and lithium.Kodama said the deposits would likely be discussed, adding: "If Afghanistan is blessed with such abundant, precious mineral resources, we certainly wish that this asset is used for the people of Afghanistan to build the nation."Karzai, after an audience with Emperor Akihito and meetings with Japan's leaders Thursday, plans to deliver a policy address on Friday at an event hosted by think-tank the Japanese Institute of International Affairs.He is due to visit the Hiroshima Peace Memorial on Saturday to commemorate the victims of the US atomic bombing of the city at the end of World War II, then travel to the former imperial capital of Kyoto.On Sunday he visits the nearby world heritage site of Nara -- another former capital that once marked the end of the Silk Road trade route which also ran through Afghanistan -- before leaving Japan.mis-fz/sak/jm/txw(Description of Source: Hong Kong AFP in English -- Hong Kong service of the independent French press agency Agence France-Presse)

## Re: Proximate triggers for the Afghan minerals story

Released on 2012-10-19 08:00 GMT

**Email-ID** 1151632  
**Date** 2010-06-14 20:36:36  
**From** matt.gertken@stratfor.com  
**To** analysts@stratfor.com

Re: Proximate triggers for the Afghan minerals story

In my opinion, what this information shows is this:

the topic is being presented now basically as media hubbub ahead of international conference on July 20, the follow-on to the Jan 28 conference in London, that is to show internat'l support for Afghanistan development. Clinton and a number of other Foreign Ministers will attend. Needless to say this is part of the Obama admin strategy of rebuilding and developing to go along with war-fighting.

Looks like US is hoping to generate buzz to support investment into Afghan. Meanwhile the US surveyors are trying to wrap up some of their surveys ahead of the conference so they can be presented to attract investors.

Matt Gertken wrote:

BTW, here's the 2007 USGS report, presumably based off the 2007 survey that lay neglected the past two years in terms of public attention being called to the development possibilities. it has some key information in it <http://pubs.usgs.gov/fs/2007/3063/fs2007-3063.pdf> .

But the latest reports say that the finds are ongoing (such as the lithium find, which isn't included in this report), and so some of today's hubbub is from the Lithium comment arising from the pentagon memo about the "saudi arabia of lithium"

Matt Gertken wrote:

Here are a series of triggers for the latest on the minerals. it essentially looks like a media blitz. This subject has been addressed by officials several times in recent months, including Petraeus in Dec

2009.

All of it is trickling out (1) following breaking news that US geologists are in numerous task forces VERIFYING the 2007 survey that was previously neglected (2) the July 20 International Conference to build international support for Afghan govt, which the French say will be the place where Afghan Ministry of Mines reveals its estimates for mineral wealth.

Here's a quick breakdown of proximate triggers:

\* US geologists verifying results of neglected 2007 survey -- Unnamed senior US officials say the latest estimates of the reserves are \$1 trillion. a small team of Pentagon officials and American geologists. The Afghan government and President Hamid Karzai were recently briefed, American officials said. - NYT June 13. The second US survey finished in 2007, results reviewed by geologists at that time, neglected for two years, then rediscovered in 2009 by a Pentagon task force on creating business in Afgh. Then the task force VERIFIED the survey, then briefed Gates and Karzai, and now we are seeing results.

\* Petraeus mentions minerals in interview on June 12. "There is stunning potential here," Gen. David H. Petraeus, commander of the United States Central Command, said in an interview on Saturday. "There are a lot of ifs, of course, but I think potentially it is hugely significant." - quoted by NYT June 13 (interview on June 12)

\* upcoming Afghan minerals presentation in July -- Internat'l Conference in Kabul July 20. Afghan authorities to present initial assessment on inventory of natural resources in subsoil and potential for econ development. -French Foreign Ministry on June 14

\* Upcoming meeting between US and Afghans on subject. (not sure if same as conference on June 20 referred to by French officials). - American and Afghan officials agreed to discuss the mineral discoveries at a difficult moment in the war in Afghanistan. -- NYT June 13

\* Ongoing surveys including Lithium finds -- geologists just now reviewing dry salt lakes in Afgh, Ghazni province, where they claim Lithium deposits resemble bolivia's. Scouring and doing technical studies. geologists on the ground feel like making

discoveries of their careers.

\* internal Pentagon memo - "KSA of Lithium" acc to NYT June 13. No date set on memo but presumed very recent.

\* Congressional panel "a few weeks ago" -- Under Secretary for Defense Policy Michele Flournoy told a Congressional panel a few weeks ago, "We are working with the Afghan ministries on long-term economic development ... they're very rich in strategic minerals and resources, very rich in agriculture, helping them to develop sustainable long-term sources of income for the nation." - ABC, June 14

\* Karzai speech and gaffe in May 2010 -- Last month, during an event at at Washington's U.S. Institute of Peace with Secretary of State Hillary Clinton, Karzai described the value of Afghanistan's mineral resources as being between "\$1 to \$3 billion." Aides off-stage corrected him, saying the value was in trillions, not billions. "Yeah, 3 billion," said Karzai, "No, no, 3 trillion," corrected an aide. Laughing, Karzai replied, "Trillion! Yeah, \$3 trillion. Trillion, sorry. That's what I meant. Trillion, trillion, yeah. \$1 to \$3 trillion."

\* Petraeus mentioned in Dec 2009 -- around the time the 2007 survey was being verified acc to NYT account -- U. S. Central Command's Gen. David Petraeus described Afghanistan's mineral resources in a radio interview last December with ABC News. "It has some of the world's remaining unexploited world class deposits of copper, iron ore and some other fairly exotic minerals. And it has some limited natural gas. The estimates of the worth of these deposits are quite substantial," he said. Petraeus told a Congressional committee three months ago that what makes these deposits valuable is that they are "a couple of the only world-class fields left."

AFP's citing the French FM spokesperson June 14:

France hails mineral riches of Afghanistan as means to boost development

### **Excerpt from report by French news agency AFP**

Paris, 14 June 2010: An initial assessment of the presence of minerals in Afghanistan should be presented during an international conference in Kabul on 20 July and will be accompanied by the outlines of a prospecting policy, the French Foreign Ministry said on Monday [14

June].

[Passage omitted: New York Times reports discovery of vast mineral resources, capable of making Afghanistan a leading exporter]

"The Afghan authorities have, supported by their partners, undertaken to inventory the natural resources in Afghanistan's subsoil and the potential they represent for enabling the country ultimately to ensure its own economic development," deputy Foreign Ministry spokeswoman Christine Fages told a news briefing.

"An initial assessment should be presented at the Kabul conference on 20 July. It should come be accompanied by the initial features of the requisite policy for prospecting for and exploiting mineral resources that has still to be defined," she added when asked about the reports in the US press.

"France, like its partners on the ground in Afghanistan, is working alongside the Afghan government, to enhance the human and economic potential of the country," she said.

"This would have to be within the framework of sustainable development and is an vital factor in the recovery of Afghanistan, which the international community has mobilized to achieve," she explained.

NYT story on June 13:

**WASHINGTON - The United States has discovered nearly \$1 trillion in untapped mineral deposits in Afghanistan,** far beyond any previously known reserves and enough to fundamentally alter the Afghan economy and perhaps the Afghan war itself, according to senior American government officials.

Notes from Afghanistan, Pakistan, Iraq and other areas of conflict in the post-9/11 era.

The previously unknown deposits - including huge veins of iron, copper, cobalt, gold and critical industrial metals like lithium - are so big and include so many minerals that are essential to modern industry that Afghanistan could eventually be transformed into one of the most important mining centers in the world, the United States

officials believe.

An internal Pentagon memo, for example, states that Afghanistan could become the "Saudi Arabia of lithium," a key raw material in the manufacture of batteries for laptops and BlackBerrys.

The vast scale of Afghanistan's mineral wealth was discovered by a small team of Pentagon officials and American geologists. The Afghan government and President Hamid Karzai were recently briefed, American officials said.

While it could take many years to develop a mining industry, the potential is so great that officials and executives in the industry believe it could attract heavy investment even before mines are profitable, providing the possibility of jobs that could distract from generations of war.

"There is stunning potential here," Gen. David H. Petraeus, commander of the United States Central Command, said in an interview on Saturday. "There are a lot of ifs, of course, but I think potentially it is hugely significant."

The value of the newly discovered mineral deposits dwarfs the size of Afghanistan's existing war-bedraggled economy, which is based largely on opium production and narcotics trafficking as well as aid from the United States and other industrialized countries. Afghanistan's gross domestic product is only about \$12 billion.

"This will become the backbone of the Afghan economy," said Jalil Jumriany, an adviser to the Afghan minister of mines.

American and Afghan officials agreed to discuss the mineral discoveries at a difficult moment in the war in Afghanistan. The American-led offensive in Marja in southern Afghanistan has achieved only limited gains. Meanwhile, charges of corruption and favoritism continue to plague the Karzai government, and Mr. Karzai seems increasingly embittered toward the White House.

So the Obama administration is hungry for some positive news to come out of Afghanistan. Yet the American officials also recognize that the mineral discoveries will almost certainly have a double-edged impact.

Instead of bringing peace, the newfound mineral wealth could lead the Taliban to battle even more fiercely to regain control of the country.

The corruption that is already rampant in the Karzai government could also be amplified by the new wealth, particularly if a handful of well-connected oligarchs, some with personal ties to the president, gain control of the resources. Just last year, Afghanistan's minister of mines was accused by American officials of accepting a \$30 million bribe to award China the rights to develop its copper mine. The minister has since been replaced.

Endless fights could erupt between the central government in Kabul and provincial and tribal leaders in mineral-rich districts. Afghanistan has a national mining law, written with the help of advisers from the World Bank, but it has never faced a serious challenge.

"No one has tested that law; no one knows how it will stand up in a fight between the central government and the provinces," observed Paul A. Brinkley, deputy undersecretary of defense for business and leader of the Pentagon team that discovered the deposits.

...

**"The Ministry of Mines is not ready to handle this," Mr. Brinkley said. "We are trying to help them get ready."**

Like much of the recent history of the country, the story of the discovery of Afghanistan's mineral wealth is one of missed opportunities and the distractions of war.

**In 2004, American geologists, sent to Afghanistan as part of a broader reconstruction effort, stumbled across an intriguing series of old charts and data at the library of the Afghan Geological Survey in Kabul that hinted at major mineral deposits in the country. They soon learned that the data had been collected by Soviet mining experts during the Soviet occupation of Afghanistan in the 1980s, but cast aside when the Soviets withdrew in 1989.**

During the chaos of the 1990s, when Afghanistan was mired in civil war and later ruled by the Taliban, a small group of Afghan geologists

protected the charts by taking them home, and returned them to the Geological Survey's library only after the American invasion and the ouster of the Taliban in 2001.

"There were maps, but the development did not take place, because you had 30 to 35 years of war," said Ahmad Hujabre, an Afghan engineer who worked for the Ministry of Mines in the 1970s.

Armed with the old Russian charts, the United States Geological Survey began a series of aerial surveys of Afghanistan's mineral resources in 2006, using advanced gravity and magnetic measuring equipment attached to an old Navy Orion P-3 aircraft that flew over about 70 percent of the country.

The data from those flights was so promising that in 2007, the geologists returned for an even more sophisticated study, using an old British bomber equipped with instruments that offered a three-dimensional profile of mineral deposits below the earth's surface. It was the most comprehensive geologic survey of Afghanistan ever conducted.

The handful of American geologists who pored over the new data said the results were astonishing.

But the results gathered dust for two more years, ignored by officials in both the American and Afghan governments. In 2009, a Pentagon task force that had created business development programs in Iraq was transferred to Afghanistan, and came upon the geological data. Until then, no one besides the geologists had bothered to look at the information - and no one had sought to translate the technical data to measure the potential economic value of the mineral deposits.

Soon, the Pentagon business development task force brought in teams of American mining experts to validate the survey's findings, and then briefed Defense Secretary Robert M. Gates and Mr. Karzai.

So far, the biggest mineral deposits discovered are of iron and copper, and the quantities are large enough to make Afghanistan a major world producer of both, United States officials said. Other finds include large deposits of niobium, a soft metal used in producing superconducting steel, rare earth elements and large gold



deposits in Pashtun areas of southern Afghanistan.

Just this month, American geologists working with the Pentagon team have been conducting ground surveys on dry salt lakes in western **Afghanistan where they believe there are large deposits of lithium. Pentagon officials said that their initial analysis at one location in Ghazni Province showed the potential for lithium deposits as large of those of Bolivia, which now has the world's largest known lithium reserves.**

For the geologists who are now scouring some of the most remote stretches of Afghanistan to complete the technical studies necessary before the international bidding process is begun, there is a growing sense that they are in the midst of one of the great discoveries of their careers.

"On the ground, it's very, very, promising," Mr. Medlin said.  
"Actually, it's pretty amazing."

ABC's take

### **U.S. Geologists Discover \$1 Trillion in Mineral Deposits in Afghanistan**

Security Concerns, Lack of Infrastructure Pose Enormous Threat to Mining Possibilities

U.S. geologists have concluded that Afghanistan, one of the world's poorest countries after 30 years of violence and war, lies atop a bonanza of mineral riches that could transform it into a wealthy nation.

The world class deposits of copper, iron ore and some other fairly exotic minerals have been estimated by the U.S. Geological Survey, which has been working to identify resources in Afghanistan, at more than \$1 trillion.

But those riches which could help end the country's vicious cycle of poverty and even more vicious cycle of war may remain tantalizingly out of reach over the next few years.

American officials have long said that Afghanistan must develop long

term sustainable economic sources of income that would provide a larger revenue stream so it can provide government services and security for itself after NATO forces leave. Under Secretary for Defense Policy Michele Flournoy told a Congressional panel a few weeks ago, "We are working with the Afghan ministries on long-term economic development ... they're very rich in strategic minerals and resources, very rich in agriculture, helping them to develop sustainable long-term sources of income for the nation."

Geologists from the U.S. Geological Survey have been working in Afghanistan for the past couple of years surveying locations across the country and have concluded that it contains vast mineral deposits. A Pentagon task force that has helped to develop Iraq's long term economic viability has been working with Afghan ministries to begin the process of helping them with the expertise some believe could turn Afghanistan into one of the world's most important mining centers.

U. S. Central Command's Gen. David Petraeus described Afghanistan's mineral resources in a radio interview last December with ABC News.

"It has some of the world's remaining unexploited world class deposits of copper, iron ore and some other fairly exotic minerals. And it has some limited natural gas. The estimates of the worth of these deposits are quite substantial," he said. Petraeus told a Congressional committee three months ago that what makes these deposits valuable is that they are "a couple of the only world-class fields left."

#### Even President Karzai Has Difficulty Imaging Afghanistan Potential Wealth

A Chinese firm recently signed a contract with the Afghan government to develop a copper mine, but given the lack of an infrastructure in Afghanistan and the current security situation, other potential investors are few and far between.

Petraeus describes potential investors as "adventure venture capitalists" because they need "an adventurous spirit to go to venture capitalism in Afghanistan." He added, "These guys have done it in other tough places, and they can see the extraordinary potential that exists. But they also see the extraordinary challenges to getting those minerals or whatever out of the ground and then out to a market because of a lack of infrastructure."

According to Petraeus, "Infrastructure, even as important for us to reestablish security, will then become very important to the Afghan security forces to continue that and, indeed, for the overall country of Afghanistan in the longer term."

The infrastructure challenges are enormous. The Afghan economy does not have the capacity to even begin the mining process and the lack of roads throughout much of the country raises challenges for how to export the mineral wealth that lies under Afghanistan. Beyond the lack of physical infrastructure is an Afghan government that does not have the experience in its ministries to even begin the process of accepting contract offers from potential investors.

The vast potential riches associated with Afghanistan's hidden mineral wealth can be difficult to comprehend, even for Afghan President Hamid Karzai. Last month, during an event at Washington's U.S. Institute of Peace with Secretary of State Hillary Clinton, Karzai described the value of Afghanistan's mineral resources as being between "\$1 to \$3 billion."

Aides off-stage corrected him, saying the value was in trillions, not billions. "Yeah, 3 billion," said Karzai, "No, no, 3 trillion," corrected an aide. Laughing, Karzai replied, "Trillion! Yeah, \$3 trillion. Trillion, sorry. That's what I meant. Trillion, trillion, yeah. \$1 to \$3 trillion."

CNN's take:

**Geologists working with the Pentagon have found vast reserves of untapped minerals in Afghanistan that could be worth \$1 trillion, the New York Times reports.**

U.S. government officials told the Times the discovery could be enough to drastically alter the economy in the war-torn country and perhaps the actual war itself. The Times cites an internal Pentagon memo, which says the country could become the "Saudi Arabia of lithium."

The discovery was heralded by military and government officials in the

U.S. and Afghanistan alike.

"There is stunning potential here," Gen. David H. Petraeus, commander of the United States Central Command, told the Times. "There are a lot of ifs, of course, but I think potentially it is hugely significant."

The possibility of large amounts of mineral deposits in Afghanistan has been known for a while, but because of constant fighting in Taliban-controlled areas the full extent of the resources haven't been known.

A USGS report and several documents and aerial photos show that attempts to discern the number of deposits and value of minerals have been under way since at least 2006. The 2007 USGS report, which detailed preliminary assessments of the minerals, says previous data on resources were limited to what was produced between 1950 and 1985, but the reserves could not be fully examined because of "the intermittent conflict over the next two decades." (Read preliminary assessment - PDF and the report by the British Geological Survey on the study - PDF)

The Afghan Ministry of Mines says on its website that more research needs to be done to fully understand the economic value of the lithium, beryllium, precious metals and other valuable metals discovered. Other known precious metals in Afghanistan include copper, gold and cobalt. These beginning details, officials said, are what led to a more in-depth study by the U.S. government that resulted in the \$1 trillion estimate.

"This will become the backbone of the Afghan economy," Jalil Jumriany, an adviser to the Afghan minister of mines, told the Times regarding the discovery of \$1 trillion in resources.

The Times report has been met with some criticism, based on the timing of the news - in the midst of a critical point in the U.S. offensive in Afghanistan.

"Wow! Talk about a game changer. The story goes on to outline Afghanistan's apparently vast underground resources, which include large copper and iron reserves as well as hitherto undiscovered reserves lithium and other rare minerals," writes Blake Hounshell on

Foreign Policy's "Passport" blog. "Don't get me wrong. This could be a great thing for Afghanistan, which certainly deserves a lucky break after the hell it's been through over the last three decades. But I'm (a) skeptical of that \$1 trillion figure; (b) skeptical of the timing of this story, given the bad news cycle, and (c) skeptical that Afghanistan can really figure out a way to develop these resources in a useful way. It's also worth noting, as [New York Times writer James] Risen does, that it will take years to get any of this stuff out of the ground, not to mention enormous capital investment."

Wired magazine was blunt with its headline - "No the U.S. Didn't Just 'Discover' a \$1T Afghan Motherlode" - for its article outlining similar skepticism. Wired references some of the similar reports from 2006 and 2007.

The Wall Street Journal advises caution when it comes to the Minerals agency in Afghanistan.

**It "has long been considered one of the country's most corrupt government departments," the WSJ reports.**



The GiFiles,  
**Files released: 5543061**

[The GiFiles](#)  
[Specified Search](#)



On Monday February 27th, 2012, WikiLeaks began publishing *The Global Intelligence Files*, over five million e-mails from the Texas headquartered "global intelligence" company Stratfor. The e-mails date between July 2004 and late December 2011. They reveal the inner workings of a company that fronts as an intelligence publisher, but provides confidential intelligence services to large corporations, such as Bhopal's Dow Chemical Co., Lockheed Martin, Northrop Grumman, Raytheon and government agencies, including the US Department of Homeland Security, the US Marines and the US Defence Intelligence Agency. The emails show Stratfor's web of informers, pay-off structure, payment laundering techniques and psychological methods.

## PER/PERU/AMERICAS

Released on 2013-02-13 00:00 GMT

<b>Email-ID</b>	799868
<b>Date</b>	2010-06-16 12:30:11
<b>From</b>	dialogbot@smtp.stratfor.com
<b>To</b>	translations@stratfor.com

PER/PERU/AMERICAS

### Table of Contents for Peru

---

#### 1) Southern Cone Crime and Narcotics Issues 14 Jun 10

corrected version: adding dropped word in first sentence of ninth paragraph For assistance with multimedia elements, contact OSC at 1-800-205-8615 or [oscinfo@rccb.osis.gov](mailto:oscinfo@rccb.osis.gov).

#### 2) Bolivia Press 15 June 10

For assistance with multimedia elements, contact OSC at 1-800-205-8615 or [oscinfo@rccb.osis.gov](mailto:oscinfo@rccb.osis.gov).

#### 3) Report Lists Cases Brought Before Special World Cup Courts to Date

Report by Louise Flanagan and Kristen van Schie: "World Cup Police, Courts Blitz Criminals" - "Range of Nationalities Fall Foul of the Law"

#### 4) RSA Firm Withdraws From Joint Venture To Build Gold Processing Plant in Zimbabwe

Unattributed report: "SA Gold Mining Company Pulls Out of Joint Venture With ACR"

5) Peru Press 14-15 Jun 10

---

#### 1) Back to Top

Southern Cone Crime and Narcotics Issues 14 Jun 10

corrected version: adding dropped word in first sentence of ninth paragraph For assistance with multimedia elements, contact OSC at 1-800-205-8615 or oscinfo@rccb.osis.gov. - Southern Cone -- OSC Summary Tuesday June 15, 2010 11:33:15 GMT

-- The official website of the National Border Guard (GN) of Argentina on 13 June carries a report datelined Buenos Aires stating that GN personnel seized 36 kg of marijuana and arrested three individuals after raiding one property in Misiones Province and conducting another three raids in Cordoba Province, where they stopped a pickup truck in which marijuana bricks had been hidden. There were 27 marijuana bricks hidden in the vehicle. The GN personnel also seized two 11.25-caliber loaders and documents. Another vehicle was also seized in connection with this case. (National Border Guard of the Argentine Nation -- Official website of the Argentine National Border Guard; URL: <http://www.gendarmeria.gov.ar>) GN personnel show the marijuana hidden in the vehicle ([gendarmeria.gov.ar](http://www.gendarmeria.gov.ar), 13 June)

More of the seized marijuana ([gendarmeria.gov.ar](http://www.gendarmeria.gov.ar), 13 June)

#### **GN Personnel Seize 16 Kg of Cocaine in Salta Province**

-- The official website of the National Border Guard (GN) of Argentina on 13 June carries a report datelined Buenos Aires stating that GN personnel seized 16.951 kg of cocaine and arrested two truck drivers and a woman for trying to ship the cocaine to Puerto Cabello in Venezuela through the port of Rosario. The cocaine was hidden inside a tanker truck filled with soybean oil. The GN conducted this operation in the area of Senda Hachada in Salta Province following a three-month investigation after GN agents stopped two Bolivian trucks on National Highway No. 34 that had entered Argentine territory through the Salvador Mazza International Bridge. The seized cocaine was valued at 161,000 pesos (\$40,800) on the border. The

cocaine was inside a plastic bag hanging inside the tank. Judge Raul Reynoso ordered seizing the two trucks involved in this case, a Volvo truck carrying the cocaine, and a Scania. The two arrested Bolivian nationals are 49- and 27-years old and they live in Santa Cruz de la Sierra (Bolivia). The 29-year-old woman was from Salvador Mazza (Salta Province) and she was accompanying the driver of the truck transporting the cocaine. GN agents remove the seized cocaine from tanker truck (gendarmeria.gov.ar, 13 June)

The two seized trucks (gendarmeria.gov.ar, 13 June)

#### GN Personnel Seize 485 Kg of Marijuana Hidden in a Truck Transporting Tangerines

-- The official website of the National Border Guard (GN) of Argentina on 11 June carries a report datelined Buenos Aires stating that GN personnel arreste d two people t ransporting 485 kg of marijuana hidden in 500 boxes with tangerines in a truck near the locality of Mbopicua in Misiones Province on 10 June. The GN personnel conducted the operation at the 1,466-km marker of National Highway No. 12. A drug-sniffing dog detected the marijuana that was in 27 bags containing 603 marijuana bricks valued at 1.9 million pesos (\$482,000). Drug-sniffing dog detects marijuana in the truck transporting tangerines (gendarmeria.gov.ar, 11 June)

GN agent shows the marijuana camouflaged with tangerines (gendarmeria.gov.ar. 11 June)

#### GN Personnel Seize Nearly 20 Metric Tons of Marijuana in January-May Period

-- Juan Manuel Bordon writes in Buenos Aires Clarin on 14 June that GN personnel seized nearly 19,714 kg of marijuana during the January-May period, which implies that the amount of seized marijuana rose by 42% compared with the same period in 2009. According to the Secretariat for the Programming and Coordination for the Prevention of Drug Abuse and for the Antinarcotics Struggle (Sedronar), the amount of seized drugs rose because consumption has increased. Paraguay's National Antinarcotics Secretariat (Senad) has reported that there are between 5,000 and 6,000 hectares of marijuana plantations in Paraguay. According to the Senad, 80% of the marijuana grown in Paraguay is taken to Brazil and 15% goes to Argentina. The GN arrested 179 persons between January and May 2010 and



457 individuals during the same period last year in connection with these drug seizures, most of them mules or drivers. The law enforcement authorities conduct most antidrug operations in Misiones, Corrientes, and Entre Rios Provinces. In a related report, Buenos Aires Clarin adds on 14 June that GN personnel have seized another 1,275 kg of marijuana from 1 to 14 June, including a light aircraft transporting 490 kg of marijuana in Corrientes Province on 3 June and another 300 kg of marijuana in Santa Fe Province on 7 June, as well 485 kg of marijuana in a truck transporting tangerines in Misiones Province. (Buenos Aires Clarin.com in Spanish -- Online version of highest-circulation, tabloid-format daily owned by the Clarin media group; generally critical of government; URL: <http://www.clarin.com> ) GN personnel conduct counternarcotics operation in Puerto Leoni in Misiones Province on 29 May and detected 2,480 kg of marijuana hidden in paper rolls (clarin.com, 14 June)

#### Counterfeit Dollar Bills Circulate Throughout Argentina

-- Buenos Aires Clarin on 13 June carries a report by Virginia Messi stating that GN personnel have recently seized \$822,000 in counterfeit dollar bills that come mostly from Peru and Colombia. The counterfeit dollar bills are introduced into Argentina by mail or through mules. Most of the counterfeit dollar bills are \$100 bills. Dollar counterfeiters produce the bills and charge dollar purchasers between 15% and 25% of the face value of the counterfeit bills. The Central Bank of the Argentine Republic has recovered nearly \$400,000 in counterfeit dollar bills in 2009. Counterfeit dollar bills circulate throughout Argentina. Counterfeit dollar bills seized in La Quiaca (Jujuy Province (clarin.com, 13 June)

#### CHILE Carabineros Personnel Conduct Massive Counternarcotics Operation Throughout Chile

-- Santiago La Tercera reports on 13 June that personnel from the OS-7 Unit of the Carabineros Police Force conducted an operation over the past weekend that led to the arrest of 112 people throughout Chile and seized 6 kg of cocaine, pressed marijuana, and cocaine base paste, as well as arms. The operation was aimed at fighting micro-drug trafficking activities. The Carabineros personnel also found the body of a Bolivian national and next to the body, 63 cocaine capsules. (Santiago La Tercera Online in Spanish -- Website of conservative daily. Belongs to the Copesa Group of Opus Dei member Alvaro Saieh. Requires subscription; URL: <http://www.tercera.com> )  
Carabineros Personnel Seize Several Firearms in Private Residence

-- Santiago La Tercera reports on 12 June that Carabineros personnel arrested Jorge Berrios Escanilla, 47, in his home in Las Palmeras neighborhood on 12 June after Katerin Cornejo Cespedes, 24, accused him, who is her employer, of trying to rape her. The man was in possession of two shotguns, an air rifle, a 38-caliber revolver, a bulletproof vest, 2 kg of marijuana, and 2 million pesos in cash (\$3,724). PARAGUAY Senad Agents Destroy Seven Hectares of Marijuana Plantations in Canindeyu Department

-- Asuncion Ultima Hora reports on 11 June that Senad agents destroyed seven hectares of marijuana plantations in Arroyo Guazu in Curuguaty in Canindeyu Department on 11 June. The destroyed marijuana plantations equal to 21 metric tons of marijuana. According to the Senad, 1 kg of marijuana costs approximately \$10. According to the Senad, another two hectares of marijuana plantations must still be destroyed. (Asuncion Ultima Hora.com in Spanish -- Website of leading daily; Majority shareholder business and media entrepreneur A.J.Vierci; URL: <http://www.ultimahora.com/> ) Senad agent destroys marijuana plantation (ultimahora.com, 11 June)

National Police Seize 2,154 Kg of Marijuana in Neembucu Department

-- Asuncion Ultima Hora on 11 June carries a report by Juan Jose Brull datelined Pilar stating that National Police personnel conducted an operation on the Parana River in the village of Gaboto, Alberdi district, in Neembucu Department on 10 June and seized 2,154 kg of marijuana. The National Police engaged in a shootout with drug traffickers, but no arrests were made. The drug traffickers were preparing to take the marijuana to Argentina. The drug traffickers abandoned the marijuana, which was in 92 bags, as well as a Pote-brand 28-caliber shotgun, six rounds of ammunition, a Chinese JW 22-caliber rifle. Counternarcotics Agents Seize 30 Kg of Marijuana in Police Post in Amambay Department

-- Asuncion Ultima Hora on 11 June carries a report by Marciano Candia datelined Pedro Juan Caballero stating that Judge Luis Benitez ordered raiding Police Post No.10 in Colonia Ybype in Pedro Juan Caballero (Amambay Department) on 11 June. The law enforcement authorities found 30 kg of marijuana in those police facilities. Noncommissioned officers Liborio Rios Jara, Crispin Coronel Aguilar, Hugo Canete, and Fredy Moreira Torales were arrested during the operation after the police found marijuana hidden in the backyard of the Police Post. Police Post No. 10

(ultimahora.com, 12 June)

## URUGUAY

No selection TRIBORDER AREA Senad Seizes More Than 3 Kg of Cocaine in Ciudad del Este

-- Asuncion Ultima Hora reports on 12 June that Senad personnel seized 3.085 kg of cocaine ready to be sold in a property in Acaray in Ciudad del Este (Alto Parana Department) on 11 June. The Senad personnel arrested Raimundo Fernandez Duarte, 48, who claimed that some Brazilian nationals had asked him to take care of some merchandise. Two packets containing cocaine were found in Fernandez Duarte's bedroom and another packet was found in the kitchen. Prosecutor Manuel Rojas Rodriguez said that the cocaine probably came from Colombia. Cocaine seized in Ciudad del Este (ultimahora.com, 12 June)

The following media were scanned and no file-worthy items were found: Santiago El Mercurio, Asuncion ABC Color, Montevideo El Observador, Montevideo El Pais, and Montevideo La Republica.

Material in the World News Connection is generally copyrighted by the source cited. Permission for use must be obtained from the copyright holder. Inquiries regarding use may be directed to NTIS, US Dept. of Commerce.

Bolivia Press 15 June 10

For assistance with multimedia elements, contact OSC at 1-800-205-8615 or oscinfo@rccb.osis.gov. - Bolivia -- OSC Summary

Tuesday June 15, 2010 12:17:04 GMT

-- La Paz La Prensa reports that the Eastern Bolivian Indigenous Peoples and Communities Confederation (CIDOB) has decided to march more than 1,400 km to pressure the government to change its stance on indigenous autonomies. CIDOB leaders who abandoned talks with the government at the weekend have announced that the protest march from Trinidad, in the Department of Beni, to La Paz will start on 17 June. CIDOB leader Adolfo Chavez has said the Framework Autonomy Law reduces indigenous powers to a minimum and, as a result, indigenous autonomy "will be symbolic not real". In response, Autonomy Minister Carlos Romero accused non-governmental organizations funded by the US Agency for International Development (USAID) of being behind the indigenous protest. (La Paz La Prensa.com in

Spanish -- Digital version of conservative daily with modest circulation. Owned by Editores Asociados, S.A., member of the Grupo Lider media conglomerate which also includes PAT (Periodistas Asociados de Television), television network recently acquired by the Daher family of Santa Cruz; URL: <http://www.laprensa.com.bo/>) ABI photo of Autonomy Minister Carlos Romero speaking to the press Government Denies Continued EGTK Activity in Bolivia

-- La Paz La Prensa cites Peruvian La Razon as reporting that a Shining Path leader is being protected by the Tupac Katari Guerilla Army (EGTK) in Beni. The Armed Forces, the Special Antinarcotics Force (FELCN) and former EGTK leader Felipe Quispe have denied the information and affirmed that the EGTK is no longer active. Cartoonist Depicts Morales Planning More Trips

-- Lapiztola cartoon in

**La Prensa depicts President Evo Morales spinning a wheel to choose his next overseas trip. Government Minimizes Competitiveness of Afghan Lithium**

-- La Paz La Prensa reports that yesterday Evaporite Resources Unit Director Alberto Echazu downplayed news about the discovery of large mineral deposits in Afghanistan, including lithium, saying that the Afghan mines would not compete with Bolivian lithium deposits. "From the information we have about other components, it would appear that it is a mining deposit. It is very complex. There are silicates that have to be extracted in mining operations and the production cost is very high, not competitive compared with salt flat mining," Echazu said. Government Analyzes Possible Lithium Partnership With Finland

-- La Paz La Razon also reports in reaction to news of Afghan lithium resources. Government spokesman Ivan Canelas said: "Afghanistan is a country that is practically at war (...), I do not know if it will be easy to resolve that issue (as published)," and added that the find "would in no way" affect Bolivian's lithium industrialization plans. Meanwhile, Mining Minister Jose Pimentel said yesterday that the government was analyzing the possibility of industrializing lithium in partnership with Finland. (La Paz La Razon Online in Spanish -- Digital version of conservative newspaper, owned by the Spanish Promotora de Informaciones, S. A. (Prisa) media conglomerate, which also includes ATB Red Nacional de Television. Although it is not part of Grupo de Diarios de America, it

reproduces special reports by this group of conservative Latin America  
dailies; URL:

<http://www.la-razon.com> <http://www.la-razon.com> ) Government Announces  
Plans To Reinforce Counternarcotics Activities

## SUMMARY/CENTCOM PRESS BRIEFING/Guidance on afghan minerals

Released on 2013-03-12 00:00 GMT

**Email-ID** 1151854  
**Date** 2010-06-15 17:02:07  
**From** colby.martin@stratfor.com  
**To** analysts@stratfor.com, friedman@att.blackberry.net

SUMMARY/CENTCOM PRESS BRIEFING/Guidance on afghan minerals

### SUMMARY

This is a Special Defense Dept. briefing related to the minerals found in Afghanistan. The two primary panel members answering questions are Paul Brinkley, director of Task Force for Business and Stability Ops and Jack Medlin, who is with USGS International Programs. The main points are: The mineral wealth in Afghanistan is spread throughout the country. It is the indigenous wealth of the Afghan people, and it will allow them to "finance their own security and living." Other quotes on the subject by Mr. Brinkley include "t means economically and in the world given the demand for some of the mineral wealth that Afghanistan possesses, how it enables Afghanistan to begin the march toward its own economically sovereign capability to finance its own human and security needs, that is the path that I think is beginning now. " and "Our focus is, we've identified 20 sites that are worth a lot of money, that will generate enough revenue for the Afghans to pay for their own way. And that's the emphasis we're trying to place on this." (This tracks with George's exit strategy analysis). The trillion dollar estimate of wealth does not include oil/natural gas nor lithium. **The USGS also implies this is only about 30 percent of known resources. Lithium wasn't put on the table of minerals because, "The surveys of the potential lithium sites in the country are under way and are highly positive, very indicative of potential industrial-scale lithium deposits. But they're not ready to measure in terms of cost value yet, which is why they're not included in that**

**table." (Interesting that the NYT article leads with Lithium but in reality those sites are not varified)** Finally, the mining currently being done in Afghanistan is considered "artisan" in nature, read farmer with a pick ax and wheelbarrow. The panel is asked about what kind of time line we would be looking at before it is possible to start making money and they state that infrastructure is the obvious problem and this is obviously not a "quick win."

<http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4643>

Kamran Bokhari wrote:

The 2-star commander of the Frontier Crops just got back to me saying this isn't making sense to him but that he's going to study it and get back to me. Sounds like it has taken even the Pakistanis by surprise. But then again, this guy is a bit lower down the food chain. So he may not be in the loop.

From: analysts-bounces@stratfor.com  
[mailto:analysts-bounces@stratfor.com] On Behalf Of Reva Bhalla  
Sent: June-14-10 11:42 AM  
To: Analyst List  
Cc: friedman@att.blackberry.net  
**Subject: Re: insight? Re: Guidance on afghan minerals**

could be a good way to get the Europeans to stick it out longer in Afghanistan as support for the NATO mission wanes in these countries

On Jun 14, 2010, at 10:36 AM, Jennifer Richmond wrote:

**Here is some more discussion (back and forth emails) from some guys that were working in the Afghanistan Reconstruction Group. Emailed Said with Kamran's questions.**

source 1: This is indeed wonderful news. We all recall how Said patiently explained the geology and mineralogy of the region, but even then I could not have imagined that the value could be this high. As usual, Said (who was my hooch mate) was right! Now we must be sure that

these discoveries are used to benefit the people of Afghanistan.

source 2: Good news... BUT you are forgetting the flip side.... XXX is right... this will not be handled correctly by the US and thus it will merely encourage the War Lords that much harder for control of the land....with the support of the Chinese of course... whom we are protecting with US forces and taxpayer dollars...

As one program director (who has been in Afghanistan since 2006 originally with the DEA) told me in an email..."this is merely encouraging people to buy tickets on the Titanic AFTER it has already hit the iceberg" .....

Kamran Bokhari wrote:

Can you set the email intro for me? I would like to make first (direct) contact by asking about the extent to which the political principals in country knew about this prior to the NYT leak and what was their response? How does it connect to the talks that Kabul has been having with the Taliban?

From: analysts-bounces@stratfor.com [mailto:analysts-bounces@stratfor.com] On Behalf Of Jennifer Richmond  
Sent: June-14-10 10:41 AM  
To: Analyst List  
Cc: friedman@att.blackberry.net  
Subject: Re: insight? Re: Guidance on afghan minerals

Source told me that we can talk directly to Said if we want... Someone else more familiar should take this - let me know. I can set up the email intro, or tell me what to ask and I will go for it.

Jennifer Richmond wrote:

A little more on Said.

The "Said" being referenced was the minerals expert in the Afghanistan Reconstruction Group when I was there. Full name is Said Mirzad. He is one of the addressees in this chain. He always claimed the minerals were there.

Here is a brief on Said Mirzad. He didn't write the article, but he was the person there when I was. Some people thought he was more than optimistic; some thought he was really onto something. It would seem to me that the USGS is a very political organization.

### **USGS geologist - Afghanistan-born Said Mirzad.**

Originally trained in France, Mirzad was director of the Afghanistan Geological Survey before the Soviet invasion in 1979. After that he ran computer services for a small USGS office in San Diego, California. After the terrorist attacks of 11 September, Mirzad's Afghan friendships vaulted him to the USGS headquarters in Reston, Virginia, to help coordinate resource development in Afghanistan.

Mirzad has deep and historic connections in Afghanistan, where his brother-in-law is the minister of defence. Mirzad is also the mentor of the minister of mines, Mohamad Ibrahim Adel, who was one of those criticized for the handling of the Aynak copper bidding competition. Mirzad has powerful allies in Washington DC; both the US State and Defense departments awarded him medals for outstanding service in 2005.

In Afghanistan, Mirzad has aided multiple projects, such as an airborne geological assessment he urged the Karzai government to fund after aid agencies declined. But some also see him as an obstructionist.

Jennifer Richmond wrote:

That was a direct quote, just fyi. Not coming from me. The guy at Ameritech said it.

quote:

Said was right. "Previously unknown" my ass - this is not a "new" discovery. I guess we're there for the long haul, huh?

George Friedman wrote:



No. We don't need to be there to buy and use the stuff. In fact, it increases the pressure on us to leave. The cost of military occupation undermines the economic benefit.

Sent via BlackBerry by AT&T

-----  
From: Jennifer Richmond <richmond@stratfor.com>

Date: Mon, 14 Jun 2010 07:55:06 -0500

To: <friedman@att.blackberry.net>; Analyst List<analysts@stratfor.com>

Subject: insight? Re: Guidance on afghan minerals

A family acquaintance who is in contact with Said Mirzad said he knew of the minerals and had been telling people about it. A guy at Ameritech there said: Said was right. "Previously unknown" my ass - this is not a "new" discovery. I guess we're there for the long haul, huh?

George Friedman wrote:

Basic question is whether or not this is a new discovery, well known or myth. Then figure out why this is news now?

Sent via BlackBerry by AT&T

-----Original Message-----

From: Kamran Bokhari <bokhari@stratfor.com>

Date: Mon, 14 Jun 2010 07:47:13

To: <analysts@stratfor.com>

Subject: Re: Guidance on afghan minerals

Yes, I recall in the 90s well before 9/11 there was great talk within

the Muslim world that the United States was going to topple the Taliban  
regime because the country had massive minerals.

On 14/06/2010 8:39 AM, George Friedman wrote:

This puts pressure on the united states. The charge in the islamic world is that the only reason the us  
invaded was strategic interest and that 911 was carried out by the government in order to justify  
invasion. This theory never had a coherent explanation. It just got one. In negotiations this is going to  
be an issue and taliban will charge that any reluctance to leave was motivated by this design.

I would like someone to trace the story behind this story. Who and why now are things I'd like to know.

Sent via BlackBerry by AT&T

--

Kamran Bokhari

STRATFOR

Regional Director

Middle East & South Asia

T: 512-279-9455

C: 202-251-6636

F: 905-785-7985

bokhari@stratfor.com

www.stratfor.com

--

Jennifer Richmond

China Director, Stratfor

US Mobile: (512) 422-9335

China Mobile: (86) 15801890731

Email: richmond@stratfor.com

www.stratfor.com

Reinaldo Taladrid Herrero (Cubavision, 23 Jun 10)

10. 2303 GMT Alonso recalls the commotion in US political and media circles as a result of remarks by General Stanley McChrystal. He shows a video clip on how US media treated the entire affair that ended in the general's dismissal and the appointment of General David Petraeus as his replacement. Alonso introduces "The Corner" segment with Reinaldo Taladrid Herrero who will discuss this matter. Taladrid begins by saying that he has been asked to do an analysis of what happened. He mentions that this is a general with vast experience who knows the rules of the game very well. Taladrid lists a number of facts: 1) In the US Army there are written and unwritten rules: active military members do not opine or meddle in politics in the media or at public events. It is not by mere chance that a magazine goes to Afghanistan and says I want to conduct an interview. It does not work that way, Taladrid states. 2) McChrystal was not the only one to talk. He had all his team talking and 3) The things they said do not leave room for error or to say that the wrong word was used. According to Taladrid, President Obama was facing a dilemma because the Afghan president called the US President asking not to dismiss McChrystal. Richard Holbrooke, the special representative for Afghanistan and Pakistan, met with Pakistani military and civilian leaders and they told him that they sympathized with McChrystal and hoped that he would not be changed. In addition, this is not new, when McChrystal was appointed he said that he needed an increase in men and President Obama took a long

time, he did not want to make a decision, and he did not want to send the men. Why? Because it was just like former President Bush in Iraq. In the meantime, McChrystal filtered a document to the media that if troops were not increased defeat could be expected in Afghanistan, making it public that if the troops were not approved, President Obama would be responsible for the defeat. Taladrid says this was insubordination and adds that a conclusion from all of it is that this was not mere chance, that McChrystal did this intentionally knowing that he was going to be dismissed. Taladrid gives some details of McChrystal's background and previous responsibilities as head of a command in northern Florida. He stresses that there were no objections to his appointment at congressional hearings when he was suggested for the job. Taladrid points to very powerful groups behind all this, basically two groups who differ on way things should be done but always with the same goal in mind. Taladrid speculates about what will happen to McChrystal. According to Taladrid, to extreme rightists McChrystal is a hero because he publicly confronted the president, disobeyed him, and preferred to leave rather than continuing obeying the socialist, democrat, and liberal president, as Republicans view the president. Taladrid predicts that this is not the end for McChrystal because all these generals wind up as directors of companies in the military industrial apparatus. But one should not be surprised, Taladrid says, if by 2012 he appears as candidate for senator in some state. Taladrid concludes that this is a Jigsaw puzzle with many pieces and that McChrystal knew what he was doing and what was going to happen to him. Taladrid suggests that the future of this man be followed. He emphasizes that the most important aspect is how groups of power clash within the empire with different views of how to attain the same objective, an objective that could be the geostrategic positioning in the area, the minerals, the Afghan lithium, the gas pipeline, or a mixture of them.11. 2320 GMT Alonso introduces Martin and Gonzalez, the panelists for the final segment of the program: the 2010 World Soccer cup.12. 2357 GMT Program ends.

Reception: Good

Duration of broadcast: 87 minutes

(Description of Source: Havana Cubavision in Spanish -- Government owned, government-controlled television station)

## Re: insight? Re: Guidance on afghan minerals

Released on 2012-10-19 08:00 GMT

<b>Email-ID</b>	1191577
<b>Date</b>	2010-06-14 15:26:11
<b>From</b>	rbaker@stratfor.com

**To** analysts@stratfor.com  
**Re: insight? Re: Guidance on afghan minerals**

OK, China is in there for copper currently. Bought its stake in '07/'08 (at least part of it was originally owned by Freeport MacMoran, according to CNBC, though that could have been somewhat misstated, given the info innt eh second article below). In short, though, the US and others have been talking about Afghan minerals for years. Lithium may be something not really looked at in full before, but certainly oil, iron, copper, gold, uranium and gems have.

Released on 2012-10-19 08:00 GMT

**Email-ID** 1151285  
**Date** 2010-06-14 16:52:37  
**From** sean.noonan@stratfor.com  
**To** analysts@stratfor.com

Afghan\_Motherlode?=-

embedded links at the Wired link.

No, The U.S. Didn't Just `Discover' a \$1T Afghan Motherlode

\* By Katie Drummond Email Author

\* June 14, 2010 |

\* 10:20 am |

<http://www.wired.com/dangerroom/2010/06/no-the-military-didnt-just-discover-an-afghan-mineral-motherlode/#ixzz0qq5tr9gG>

Despite what you may read this morning, the U.S. military did not just "discover" a trillion dollars' worth of precious minerals in Afghanistan.

The New York Times today proclaimed that Afghanistan is apparently poised to become "the Saudi Arabia of lithium" - a metal used to produce gadgets like iPods and laptops. The discovery will also, according to Pentagon documents quoted by the Times, fundamentally transform the country's opium-reliant economy.

But the military (and observers of the military) have known about Afghanistan's mineral riches for years. In a 2007 report, the Geological Survey and the Navy concluded that "Afghanistan has significant amounts of

undiscovered non-fuel mineral resources," including "large quantities of accessible iron and copper [and] abundant deposits of colored stones and gemstones, including emerald, ruby [and] sapphire."

Not to mention that the \$1 trillion figure is - at best - a guesstimate. None of the earlier U.S military reports on Afghan's mineral riches cite that amount. And it might be prudent to be wary of any data coming out of Afghanistan's own Mines Ministry, which "has long been considered one of the country's most corrupt government departments," the Wall Street Journal reports.

And the timing of the "discovery" seems just a little too convenient. As Blake Hounshell at Foreign Policy notes, the Obama administration is struggling to combat the perception that the Afghan campaign has "made little discernible progress," despite thousands of additional troops and billions of extra dollars.

Still, Pentagon officials are touting the find as a potential economic game-changer - and one that could end decades of conflict. But whether it's oil or coltan, rich pockets of resources are always a mixed blessing. Just ask children in Congo, home to 80 percent of the world's coltan supply, who were forced to mine for the precious metal that was later used to manufacture tech gadgets.

It'll take years, and a ton of capital investment, before Afghanistan's deposits can even be mined. And when they can, it's anybody's guess who'll actually be profiting. Hounshell sums up the mess nicely:

Meanwhile, the drive for Kandahar looks to be stalled in the face of questionable local support for Karzai's government, the Taliban is killing local authorities left and right, and the corruption situation has apparently gotten so bad that the U.S. intelligence community is now keeping tabs on which Afghan officials are stealing what.

Read More

--

Sean Noonan  
Tactical Analyst  
Mobile: +1 512-758-5967

Strategic Forecasting, Inc.  
www.stratfor.com

AFGHANISTAN

**1) Afghanistan could be holding \$1 trillion of untapped mineral deposits including critical industrial metals such as lithium, the New York Times reported, quoting US government officials. - DAWN -**

<http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/news/world/04-us-discovers-1trillion-mineral-deps-afg-qs-04>

2) The previously unknown deposits - including huge veins of iron, copper, cobalt, gold and critical industrial metals like lithium - are so big and include so many minerals that are essential to modern industry that Afghanistan could eventually be transformed into one of the most important mining centers in the world, the United States officials believe. - NYT - <http://www.nytimes.com/2010/06/14/world/asia/14minerals.html?hp>

## **Re: MISC - U.S. Identifies Vast Riches of Minerals in Afghanistan (NYT)**

Released on 2012-10-19 08:00 GMT

**Email-ID** 395537

**Date** 2010-06-14 17:57:44

**From** mongoven@stratfor.com

**To** morson@stratfor.com, defeo@stratfor.com, pubpolblog.post@blogger.com

Re: MISC - U.S. Identifies Vast Riches of Minerals in Afghanistan (NYT)

No, we're arming ourselves off of middle eastern oil to become dependent on Chinese battery makers and renewable energy parts. Let them worry about Morales and the Taliban

On Jun 14, 2010, at 11:44 AM, Joseph de Feo <defeo@stratfor.com> wrote:

Fascinating piece by Jim Risen in today's NYT. Afghanistan the "Saudi Arabia of lithium." Evo Morales has big plans to make Bolivia the world capital of lithium batteries and electric cars, and I'm not sure this really affects it -- Afghanistan is possibly the only place even less capable than Bolivia of getting its lithium out of the ground and into commerce.

By the way, are we weaning ourselves from dependence on Middle Eastern oil only to become dependent on Latin American and Near Eastern/Central Asian lithium?

---

<http://www.nytimes.com/2010/06/14/world/asia/14minerals.html?pagewanted=all>  
U.S. Identifies Vast Riches of Minerals in Afghanistan - NYTimes.com |  
By JAMES RISEN

**WASHINGTON a The United States has discovered nearly \$1 trillion in untapped mineral deposits in Afghanistan, far beyond any previously known reserves and enough to fundamentally alter the Afghan economy and perhaps the Afghan war itself, according to senior American government officials.**

The previously unknown deposits a including huge veins of iron, copper, cobalt, gold and critical industrial metals like lithium a are so big and include so many minerals that are essential to modern industry that Afghanistan could eventually be transformed into one of the most important mining centers in the world, the United States officials believe.

An internal Pentagon memo, for example, states that Afghanistan could become the aSaudi Arabia of lithium,a a key raw material in the manufacture of batteries for laptops and BlackBerrys.

The vast scale of Afghanistanas mineral wealth was discovered by a small team of Pentagon officials and American geologists. The Afghan government and President Hamid Karzai were recently briefed, American officials said.

While it could take many years to develop a mining industry, the potential is so great that officials and executives in the industry believe it could attract heavy investment even before mines are profitable, providing the possibility of jobs that could distract from generations of war.

aThere is stunning potential here,a Gen. David H. Petraeus, commander of the United States Central Command, said in an interview on Saturday. aThere are a lot of ifs, of course, but I think potentially it is hugely significant.a



The value of the newly discovered mineral deposits dwarfs the size of Afghanistana's existing war-bedraggled economy, which is based largely on opium production and narcotics trafficking as well as aid from the United States and other industrialized countries. Afghanistana's gross domestic product is only about \$12 billion.

This will become the backbone of the Afghan economy, a said Jalil Jumriany, an adviser to the Afghan minister of mines.

American and Afghan officials agreed to discuss the mineral discoveries at a difficult moment in the war in Afghanistan. The American-led offensive in Marja in southern Afghanistan has achieved only limited gains. Meanwhile, charges of corruption and favoritism continue to plague the Karzai government, and Mr. Karzai seems increasingly embittered toward the White House.

So the Obama administration is hungry for some positive news to come out of Afghanistan. Yet the American officials also recognize that the mineral discoveries will almost certainly have a double-edged impact.

Instead of bringing peace, the newfound mineral wealth could lead the Taliban to battle even more fiercely to regain control of the country.

The corruption that is already rampant in the Karzai government could also be amplified by the new wealth, particularly if a handful of well-connected oligarchs, some with personal ties to the president, gain control of the resources. Just last year, Afghanistana's minister of mines was accused by American officials of accepting a \$30 million bribe to award China the rights to develop its copper mine. The minister has since been replaced.

Endless fights could erupt between the central government in Kabul and provincial and tribal leaders in mineral-rich districts. Afghanistan has a national mining law, written with the help of advisers from the World Bank, but it has never faced a serious challenge.

No one has tested that law; no one knows how it will stand up in a fight between the central government and the provinces, a observed Paul A. Brinkley, deputy undersecretary of defense for business and leader of the Pentagon team that discovered the deposits.

At the same time, American officials fear resource-hungry China will try to dominate the development of Afghanistan's mineral wealth, which could upset the United States, given its heavy investment in the region. After winning the bid for its Aynak copper mine in Logar Province, China clearly wants more, American officials said.

Another complication is that because Afghanistan has never had much heavy industry before, it has little or no history of environmental protection either. The big question is, can this be developed in a responsible way, in a way that is environmentally and socially responsible? a Mr. Brinkley said. aNo one knows how this will work.a

With virtually no mining industry or infrastructure in place today, it will take decades for Afghanistan to exploit its mineral wealth fully. aThis is a country that has no mining culture,a said Jack Medlin, a geologist in the United States Geological Survey's international affairs program. aThey've had some small artisanal mines, but now there could be some very, very large mines that will require more than just a gold pan.a

The mineral deposits are scattered throughout the country, including in the southern and eastern regions along the border with Pakistan that have had some of the most intense combat in the American-led war against the Taliban insurgency.

The Pentagon task force has already started trying to help the Afghans set up a system to deal with mineral development. International accounting firms that have expertise in mining contracts have been hired to consult with the Afghan Ministry of Mines, and technical data is being prepared to turn over to multinational mining companies and other potential foreign investors. The Pentagon is helping Afghan officials arrange to start seeking bids on mineral rights by next fall, officials said.

aThe Ministry of Mines is not ready to handle this,a Mr. Brinkley said. aWe are trying to help them get ready.a

Like much of the recent history of the country, the story of the discovery of Afghanistan's mineral wealth is one of missed

opportunities and the distractions of war.

In 2004, American geologists, sent to Afghanistan as part of a broader reconstruction effort, stumbled across an intriguing series of old charts and data at the library of the Afghan Geological Survey in Kabul that hinted at major mineral deposits in the country. They soon learned that the data had been collected by Soviet mining experts during the Soviet occupation of Afghanistan in the 1980s, but cast aside when the Soviets withdrew in 1989.

During the chaos of the 1990s, when Afghanistan was mired in civil war and later ruled by the Taliban, a small group of Afghan geologists protected the charts by taking them home, and returned them to the Geological Survey as library only after the American invasion and the ouster of the Taliban in 2001.

There were maps, but the development did not take place, because you had 30 to 35 years of war, said Ahmad Hujabre, an Afghan engineer who worked for the Ministry of Mines in the 1970s.

Armed with the old Russian charts, the United States Geological Survey began a series of aerial surveys of Afghanistan's mineral resources in 2006, using advanced gravity and magnetic measuring equipment attached to an old Navy Orion P-3 aircraft that flew over about 70 percent of the country.

The data from those flights was so promising that in 2007, the geologists returned for an even more sophisticated study, using an old British bomber equipped with instruments that offered a three-dimensional profile of mineral deposits below the earth's surface. It was the most comprehensive geologic survey of Afghanistan ever conducted.

The handful of American geologists who pored over the new data said the results were astonishing.

But the results gathered dust for two more years, ignored by officials in both the American and Afghan governments. In 2009, a Pentagon task force that had created business development programs in Iraq was transferred to Afghanistan, and came upon the geological data. Until then, no one besides the geologists had bothered to look at the

information and no one had sought to translate the technical data to measure the potential economic value of the mineral deposits.

Soon, the Pentagon business development task force brought in teams of American mining experts to validate the survey findings, and then briefed Defense Secretary Robert M. Gates and Mr. Karzai.

So far, the biggest mineral deposits discovered are of iron and copper, and the quantities are large enough to make Afghanistan a major world producer of both, United States officials said. Other finds include large deposits of niobium, a soft metal used in producing superconducting steel, rare earth elements and large gold deposits in Pashtun areas of southern Afghanistan.

Just this month, American geologists working with the Pentagon team have been conducting ground surveys on dry salt lakes in western Afghanistan where they believe there are large deposits of lithium. Pentagon officials said that their initial analysis at one location in Ghazni Province showed the potential for lithium deposits as large as those of Bolivia, which now has the world's largest known lithium reserves.

For the geologists who are now scouring some of the most remote stretches of Afghanistan to complete the technical studies necessary before the international bidding process is begun, there is a growing sense that they are in the midst of one of the great discoveries of their careers.

On the ground, it is very, very, promising, Mr. Medlin said.

Actually, it is pretty amazing.

Pakistani Editorial Asks Afghan People To Take Action To Save Resources  
Editorial: "Discovery of Precious Mineral Resources in Afghanistan" -  
Nawa-e Waqt

Thursday June 17, 2010 14:47:01 GMT

unearthed nearly \$1 trillion untapped mineral deposits beneath the Afghan soil, which is far beyond any previously known reserves.

The report says the previously unknown deposits -- including huge veins of iron, copper, cobalt, gold, and critical industrial metals like lithium -- are so huge and include numerous minerals, which are requisite for modern industry, that the US officials believe Afghanistan can be eventually transformed into one of the most important mining centers of the world. A US official stated that Afghanistan could become the "Saudi Arabia of

lithium," a key raw material, which is required to manufacture batteries. These lithium reserves are even larger than those of Bolivia, the largest lithium exporter in the entire world. These lithium reserves can be exported to transform Afghanistan into Saudi Arabia. There are vast resources of copper that Afghanistan can become the largest copper exporting country of the world.

Afghanistan is a poor country and through the unearthed mineral resources, it can become a prosperous and developed country like Saudi Arabia. However, these days, Afghanistan is in the clamps of Jews and Christians.

Today, in Afghanistan, these imperial forces have let a hell loose in the name of war on terror. After the 9/11 incident, when the United States invaded Afghanistan, the global media raised the point that the United States had fixed its eyes on rich resources of Afghanistan and its mineral treasures. Finally, it has been proved true today.

In fact, their agenda was essentially to occupy the Afghan resources and make use of this wealth. This is the very reason because of which the US experts continued their research and exploration even in the war-hit areas of Afghanistan.

Today, it has become more crucial for the Afghan people not to let the United States and its allies occupy the Afghan resources; otherwise these foreign forces will permanently stay in the areas of Afghanistan. The mujahidin should accelerate their activities and should kick out these imperial forces before these imperialists take away precious reserves and resources and materialize their flagitious plans.

President Hamid Karzai should also use wisdom and take courageous steps to stop falling Afghan wealth in the hands and use of the United States.

(Description of Source: Rawalpindi Nawa-e Waqt in Urdu -- Privately owned, widely read, conservative Islamic daily, with circulation around 125,000. Harshly critical of the US and India.)

Material in the World News Connection is generally copyrighted by the source cited. Permission for use must be obtained from the copyright holder. Inquiries regarding use may be directed to NTIS, US Dept. of Commerce.

### **Discovery of Lithium will Add new Dimension to Afghan Issue**

Article by I. M. Mohsin: "Alexrod on Afghanistan" - The Nation Online  
Thursday June 17, 2010 08:23:14 GMT

A speculative news item carried by The New York Times during last week set off ripples in the American political circle. To guard against some vicious reaction from the rightwing, President Barack Obama's senior Advisor David Alexrod felt obliged to issue last Sunday a clarification about the state of the ongoing war and attempts at reaching a settlement

with the Taliban.

Prior to that Secretary Robert Gates had explained his perception of the current ground realities in Afghanistan. Claiming to have told President George Bush, on accepting the office of Secretary Defence, he reiterated that Afghanistan had received scant attention from the Republican administration. He, however, indicated that post-surge developments had undercut the Taliban advance under the new strategy this year. If the objective conditions are any guide, such a statement would appear to be wishful. Then, if this were so, the Taliban would not have publicly spurned the peaceful overtures being made by President Hamid Karzai. This appears to be a part of a baffling strategy being pursued by the US Department of Defence or general staff whereby attacks by the Taliban are being ignored. Instead thereof insinuations are being made that the 'enemy' is losing ground.

Repeating the statement of Karzai made before the peace jirga, Alexrod said that a new government could emerge in Kabul wherein the Taliban would form a coalition. Such an arrangement would ensure security for the people and this would lead to the start of the requisite development process in a safer environment. He also expressed the hope that on joining such an arrangement, the Taliban would lay down their arms and devote their undivided attention to the reconstruction of their war-torn country. Citing this as an indispensable condition, he still expressed the hope that Karzai's efforts will bear fruit as there are many indications to that effect.

Indeed, this appears to be more of a psychological warfare and less of a strategy for the people of the region concerned. Such assertions may lull the public opinion in the US, to some extent, but for the Afghans it is like 'Alice in Wonderland'. In Afghanistan, the people generally are baffled as they cannot correlate the prevailing mess to such homilies. While Karzai and his mentors are active on the propaganda front, the Taliban are maintaining a queer silence besides launching attacks against the US forces at places of their choice subject to their own programme. Whenever they speak up, they only display their derision for such conciliatory initiatives.

The New York Times report also utilised a statement made by Amrullah Saleh, the 36-year old former intelligence chief, to the effect that Karzai was holding private discussions with the Taliban and Pakistan. Incidentally, Saleh was fired by the Kabul government following the brazen attacks by the Taliban on the peace jirga. Apparently, his 'revelation' should have made no news which the concerned journalist tried to blow up. But Alexrod also hinted at the same in his reply on Saleh, calling his assertions as "coloured".

Saleh had also indicated that the US wanted to 'rule' Afghanistan which had frustrated too many people. On this, the US presidential Advisor made

it clear that his country's objective could be easily specified. He maintained: "The mission is about Al-Qaeda, about putting pressure on Al-Qaeda on both sides of the border, about not letting Afghanistan become a safe harbour, safe haven for Al-Qaeda again." Wanting to sound more convincing, he went on to emphasise: "Ultimately this is about our security and that's why we are there."

The Advisor also recounted some of the successes scored by the US forces since the new administration took over. He stressed that half of the Taliban's top 20 leaders had been killed, thanks to the cooperation extended by the Government of Pakistan. Likewise, some operations conducted in Afghanistan had also yielded similar results. However, to back up the ongoing peace overtures in Kabul, he concluded: "At the end of the day, however, we've always said that this will involve the future of Afghans....It will involve a political solution just as it did in Iraq."

Nevertheless, President Karzai seems to be pushing ahead with his peace mission in a manner which no 'Vichy' government can ever afford to do. His mentors, the US, have to be connected to the said stance all over to bring peace to Afghanistan.

Lately, the US administration is openly supporting such moves although till early this year they were prone to keep mum.

Britain's new Prime Minister David Cameron after visiting Afghanistan last week has also used a very diplomatic lingo to reflect a similar approach. His statement to the House of Commons on Monday reflected his serious interest in pulling out of this quagmire. He has lately claimed that Al-Qaeda is really "weakened" for now, implying that the Afghans should take over their own security so that the "foreign troops" can be divested from Afghanistan quickly. This is also the stated position of President Barack Obama, who wants to start withdrawing his forces by mid next year. Even if it holds good, Sergei Ivanov, the Russian Deputy Prime Minister, thinks that the US troops would have to stay longer than the Russians did in Afghanistan.

A US report suggests that huge deposits of iron, copper, gold and lithium have been discovered worth a trillion dollars. If this is so, then it raises the stakes for both the Afghans and the American administration. So far, the US administration has been known to be heavily influenced by its oil lobby in the post-9/11 conduct towards the ongoing war. Now another dimension would be involved. The US has certainly lost a lot of goodwill among the Afghans already and what the neocons might do now will hurt the US badly.

In this scenario, Russia may also want to benefit from such a valuable resource next door. However, it may find many difficulties in its way.

The Chinese stand a good chance of winning the goodwill of the Afghans

despite the fact that it may provoke ire of the Indians, who are being built by the US for a peculiar role in the region.

Above all, Pakistan could be crucial in the fruitful utilisation of such natural resources by Afghanistan. The two countries can cooperate with China and co-opt some other ally to successfully hit out of trouble.

The writer is a former Secretary Interior.

(Description of Source: Islamabad The Nation Online in English -- Website of a conservative daily, part of the Nawa-i-Waqt publishing group. Circulation around 20,000; URL: <http://www.nation.com.pk>)

### **Article Discusses Report About Deposits of Minerals in Afghanistan**

Article by Arif Ayub: "Minerals in Afghanistan" - The Nation Online  
Wednesday August 11, 2010 11:41:23 GMT

On June 17, 2010, the New York Times and the rest of the US media led prominent stories on US geologists having discovered vast deposits of iron, copper, gold, lithium and other minerals in Afghanistan worth an estimated one trillion dollars. For good measure, the Afghan government claimed that actually their resources were worth three trillion dollars. While these reports are absolutely true, they are equally meaningless. Firstly, the discoveries are not new and were first brought to international attention by the Russian geologists in the 60's. Secondly, the figure of one trillion dollar is the technological value of the survey. More important is the financial feasibility report, particularly the economic feasibility report, which also includes the environmental impact.

In Kabul, I had seen the Russian reports in the Ministry of Mines which covered almost all the discoveries being currently announced by the US media including the petroleum and gas deposits in northern Afghanistan. The Taliban Minister said with considerable irony that the Afghan government had been very concerned about the welfare of their future generations and therefore had made no attempt to exploit these resources.

The Haji Gak iron deposits which are particularly mentioned in the reports were discovered in the early 60's and in fact our Commerce Minister Ghulam Farooque Khan had suggested that instead of the Karachi Steel Mill we should consider the alternative of a Steel Mill at Kalabagh using Afghan ore. However, there was difficulty in ensuring regular supplies given the Afghan attitude towards Pakistan in those days, because of the hard line policies of Daud Khan. It was a case of Pashtun adventurism winning over Pashtun pragmatism. After 50 years, the situation has not changed much.

The only country bold enough to take the plunge to invest massively in Afghanistan has been China. The China Metallurgical Group and Jiangxi Copper Company won a bid in 2007 to develop the Aimak Copper Mine paying a royalty of \$400 million per year to the Afghan government, whose total



revenues currently are at one billion dollars. The Chinese are also planning to put up a power plant in Logar to run the copper mine and also build local road connections and transnational railways lines in an investment that is expected to reach four billion dollars. According to reports, the Aimak Mine alone is expected to produce 12 million tons of copper out of Afghanistan's total estimated reserves of 60 million tons of copper.

Details of the US Geological Survey conducted in 2007 are as follows:

Mineral Potential Value in current prices (\$ Billion)

Iron 421

Copper 274

Niobium 81

Cobalt 51

Gold 25

Molybdenum 24

Rare Earth Elements 7

Asbestos 6

Silver 5

Potash 5

Aluminium 4

Graphite 1

Lapis Lazuli 1

Fluorite 1

Phosphorus 1

Led, Zinc, Mercury, Strontium 1

Sulphur, Talc, Magnetite, Kaolin 1

In their preliminary assessment of non-fuel mineral resources for Afghanistan, the US Geological Survey estimated that 2.2 billion tons of iron was available in the Haji Gak deposit alone with 69 percent iron. In addition, there are also considerable deposits between 47 and 68 percent

iron, making it one of the largest iron deposits in Asia. So far, the Indian companies are in the lead bidding for the mining rights including Essar Minerals, Rashtriya Ispat Nigam and Ispat Industries. The Chinese Metallurgical Group was also a bidder but pulled out after allegations that it had won the Aymak copper contract by paying \$30 million in bribes.

Besides these non-fuel deposits the Russian had discovered considerable quantities of oil and gas in the area around Mazar-i-Sharif, some of which is already being exploited, with small fertiliser factory. There are also confirmed deposits of Naphtha in the Polekhumri region, while reports of petroleum deposits in the Kandhar and Helmand region.

Despite this immense geological wealth many of the deposits are in zones dominated by the insurgency and have little or no infrastructure. In the Afghan bureaucracy, corruption is high and government performance and rule of law are weak. Afghanistan therefore has a long way to go before it can take advantage of its mineral wealth. We had a similar experience in Pakistan where we have been unable to utilise the Thar coal deposits or the copper deposits at Rekodiq (which are comparable to those at Aimag).

The New York Times seems to have realised that it had been a victim of media hype and within one week it accepted the conventional wisdom that the minerals in Afghanistan required considerable investment for mining and processing, as well as for infrastructure development in railways and roads, which would be particularly expensive in the mountainous and undeveloped regions of Afghanistan where these minerals are normally found. Gold, silver, copper and other minerals are usually located in ore that must be reached by tunnel, blasted out by the tons, carried to the surface and ground to powder for processing. Digging the shafts and building elevators, processing plants and infrastructure can cost several billion dollars for a single mining operation. Economic recoverability also requires that a resource cannot only be produced, but also exported for less money than its sale value, in order to provide enough return on investment to account for the associated risks of the investor. This assumes that the US military would succeed in securing the lines and supply lines and they would be in the country for the next 10 years in order for the project to bear fruit. Electricity plants also need to be built close to the sites since mining projects require enormous amount of energy. In Afghanistan, despite the passage of 10 years, the US has still not been able to provide the generators to make functional the Kajkai hydroelectric project on Helmand River. It seems unlikely therefore that the new power projects could be established within the economic framework of time relevant to the mining projects.

The writer is a former ambassador.

(Description of Source: Islamabad The Nation Online in English -- Website of a conservative daily, part of the Nawa-i-Waqt publishing group. Circulation around 20,000; URL: <http://www.nation.com.pk>)

### **Review of Various U. S. UAVs That Are Needed by RF Ministry of Defense**

Article by Vladimir Shcherbakov on the new unmanned flying vehicles [UAVs] being developed in the United States that are of interest to the Ministry of Defense of Russia, particularly the hand-launched UAVs that use hydrogen fuel cells in their power plants: "How the Problems of Developing Mini-Drones Are Being Resolved" - Voenno-Promyshlennyy Kuryer Online Wednesday August 11, 2010 18:40:43 GMT

According to the most conservative estimates, in the last decade alone, the Pentagon has acquired no less than 12,500 UAVs of various types--UAVs that are narrowly specialized. Such UAVs usually have a take-off weight ranging from about .25 kilograms to 6.5 kilograms and a wingspan ranging from .7 meters to 2.7 meters. They can be transported, along with the control panel and, if necessary, auxiliary equipment, in one or two backpacks. The drones snapped together and made ready for launch in a matter of minutes. After that, the soldier only has wave his hand, in a literal sense, and send the aerial mini-robot flying up into the sky (that is, the soldiers uses his hand to hurl the drone into the sky).

### **Two hours are not sufficient.**

At the same time, regardless of its small dimensions and weight, the man-portable UAVs are quite capable of conducting of reconnaissance, primarily in the optical and/or infrared ranges. They are also able to transmit reconnaissance information about the enemy to the control panel of the operator in real time, providing a current picture of the situation on a battlefield for the commander of a subunit and even an individual soldier.

The payload of these UAVs usually include compact video cameras, photo cameras, and televisions. An electric motor, powered by a battery, is used as the power plant for the UAVs. That makes it possible to reduce the noise and weight of the UAV. At the same time, it makes the UAV more explosion-proof and fireproof.

But, on the other hand, such drones also have a number of shortcomings. The most serious shortcoming is the small duration of the flight, which is due to the small size and take-off weight of the drone. Its small size does not allow the placement of a significant quantity of power sources onboard. As a result, as a rule, the mini-drones are not able to be in the sky for more than one or two hours.

Of course, for the fulfillment of the majority of tasks, for which such UAVs were designed, this is enough time. All the same, the mini-drone is a means for operational reaction. It is a pre-strike staging vehicle, so to speak. However, after analyzing the results of the operation of UAVs of this class, including their operation in combat conditions, for example, during the operations in Afghanistan and Iraq, the American generals and military experts reached a conclusion on the necessity to increase the

flight duration of the man-portable drones by a factor of 1.5 or a factor of 2. And, if possible, by even more than that.

Recently, in an interview, a representative of a department of the U. S. Air Force Research Laboratory, which engages in research in the sphere of the adaption of hydrogen fuel cells to power plants of flying vehicles of various types, made the following statement to journalists: "A long flight duration is very important for the military. That will make it possible for the American soldiers to keep targets under observation for a longer period of time and it will also make it possible to carry out reconnaissance and observation over a large area until the drone ends its flight or is recalled for a recharging of the battery or the replenishment of the fuel supply. On a modern battlefield, information is a key factor. Consequently, by increasing the flight duration, we can significantly increase the amount of reconnaissance information that is accessible for us and forces that are allied with us."

A hybrid engine.

In this connection, however, a question immediately arises: How can the flight duration of the UAV be increased without a substantial increase in its size and weight? Indeed, it is not possible, at the present time, to obtain a positive result by increasing the effectiveness of the operation of the batteries or an increase in the number of them aboard the UAV: The engineers are not promising to develop batteries with greatly improved working characteristics in the near future.

A number of companies and organizations, of course, are trying to develop more compact engines, which use organic types of fuel, or engines of the hybrid type. Thus, in the beginning of 2010, the American agency, DARPA (Defense Advanced Research Projects Agency), awarded a contract to Aurora Flight Sciences that provides funding for the first stage of development of small UAVs with hybrid power plants of a new type. The power plant will consist of an electric motor and a compact turbo-diesel engine.

The new motor must have more effectiveness, horsepower, and fuel efficiency. It also must make less noise in comparison with the gas engines that are being used today. At the same time, its power must not be less than 10 horsepower. The purpose of this work, which is being carried out by specialists of Aurora Flight Sciences, is to adapt a diesel engine, which requires heavy fuel, to drones. At the present time, that is not expedient, mainly because of the relatively large sizes and weights of motors that use diesel fuel or JP-8.

However, such engines are still only prospective projects. At the present time, it is necessary to increase the flight duration.

**Hydrogen fuel cells.**

It has been managed to find a solution. The use of hydrogen fuel cells as energy sources. Fortunately, real break-through results have been achieved in this sphere in recent years in the West.

For example, Protonex, a company which engages in the development of hydrogen fuel cells, recently demonstrated the possibility of increasing the flight duration of a UAV, which was equipped with hydrogen fuel cells (the take-off weight of the UAV was 6.3 kilograms), to nine hours. And, according to the specialists of Protonex, the volume of the fuel cells and fuel cartridge together is a little less than that of a 2-liter bottle of Coca-Cola.

Previously, the company had developed a wide range of fuel elements with powers ranging from 100 to 500 watts. True, in this case, it was necessary to put a lithium-ion battery onboard the UAV in order to obtain additional power during the take-off and landing of the UAV. The battery itself, however, is recharged by the hydrogen fuel cell in flight.

In an interview with the leading American political-military weekly, Defense News, Scott Pearson, the head of the Protonex company, said that drones, equipped with hydrogen fuel cells and lithium-ion batteries, can remain in the air two to three times longer than their counterparts, which have traditional power plants with electric motors.

The results of the tests made a good impression on the leadership of the U. S Department of Defense, which soon awarded a contract to the company. The contract amounts to 3.3 million dollars and it is for the development of an improved type of fuel cell, as well as the accompanying equipment and instrumentation.

It is planned that the hydrogen fuel cell, on the development of which specialists of Aurora Flight Sciences have been working, will be integrated into the power plant of a Puma AE UAV, which was developed by the company, AeroVironment. The length of this UAV is 1.4 meters. The wingspan is 2.7 meters. The drone is designed for the conducting of reconnaissance in daytime and nighttime conditions, for which it is equipped with electro-optical and infrared cameras. The power plant of the drone is an electric engine (that is, the electric engine turns the UAV's propeller, whereas the fuel cell powers the cameras, communications gear, and flight controls and recharges the batteries for the electric motor). All of the onboard equipment is for reconnaissance. The systems for flight control and communications with the ground based controller also have electrical power.

It was not by chance that AeroVironment was selected for this project. The specialists of this company had the honor of developing the RQ-11A "Raven", perhaps the most famous hand-launched UAV in the world. The weight of the Raven is 1.9 kilograms. The fleet of these UAVs in the U. S. Armed Forces alone numbers about 4,000. The first flight of these drones

took place in 2001 and just a few years later, in 2003, they were accepted into the arsenal of the U. S Armed Forces. Subunits of the Special Operations Command of the U. S, Armed Forces was the first to receive the Ravens in significant quantities. In accordance with the initial contract, about 850 drones of this type were purchased. Each drone cost about 35,000 dollars (the cost of one whole system is about 250 thousand dollars).

Problems of technology.

The following is stated in one of the advertising bulletins of the Protonex company: "All that you have to do is add water. After that, you will obtain a fuel with a high energy density."

The reference here is to hydrogen, which is released when (sodium) borohydrate is mixed with simple water and exposed to a catalyst and heat. The gas that is obtained enters directly into the fuel cell to the anode, which uses a small amount of platinum as a catalyst to divide the hydrogen into protons and electrons. The latter form an electrical current which flows to an external circuit. This electrical current is necessary for the operation of the power plant and the onboard equipment. The protons, in turn, are conducted through a hydrogen proton exchange membrane in the fuel cell to a catalytic cathode, where they combine with oxygen in the air to produce water. Water is necessary for obtaining hydrogen. Such is the cycle of substances within the bounds of one drone.

Of course, the duration of such a semi-closed cycle is contingent of the supplies of the basic substance--sodium borohydrate. The expended fuel cartridges can either be discarded in flight or brought back and subsequently sent for recharging. In this connection, a special control system, built into the cartridge, automatically regulates the degree of the reaction and the rate of hydrogen production.

Representatives of Protonex said that a distinguishing feature of this fuel-energy system, which is being developed in accordance with the contract that was awarded by the Pentagon, is the fact that all of the components used in this system, including the fuel and the residue, are not toxic and not combustible. Moreover, the system is cost-effective and that is of no small importance.

In an interview with journalists, Steven Gitlin, the press secretary for AeroVironment, emphasized: "We see a great potential for our Puma AE UAV, which is equipped with a system of hydrogen fuel cells. Such a drone can be used quite effectively for perimeter monitoring (guarding) or for flying ahead of a ground convoy for an extended period of time."

Moreover, it should be emphasized that AeroVironment, which produces the Puma AE drones, is making modifications not only for subunits of the U. S. Army, border services, and the U. S. Air Force, but also for special operations. It is also making modifications for the U. S. Navy and the U.

S. Coast Guard.

This drone is like an "omnivore". That is reflected in the very name of the UAV. AE stands for All- Environment, which means that it can be used in all conditions. In particular, a modification of the Puma has been designed for the Navy and the Coast Guard. It is waterproof and, consequently, it can carry out a safe landing on a water surface. These UAVs are operated with a hand-held control panel, measuring 15.24 centimeters by 25.40 centimeters, with a screen that measures 10.16 centimeters by 15.24 centimeters (Note: The screen displays video transmissions from the UAV and has five knobs for directing the UAV and its onboard electro-optical and infrared cameras.).

Representatives of the U. S. Department of Defense said that it is planned to complete the first stage of the program, which is aimed at the development of a UAV, with an increased flight duration and with a prospective power plant based on hydrogen fuel cells, in 2010-2011. With positive results of tests, it is planned to accept such UAVs into the arsenals of the various branches and combat arms of the Armed Forces of the United States in the shortest time possible.

The military of other countries are also showing interest in these prospective developments. It seems that such drones would also be very useful for the Russian militarized structures. But the trouble is that, unfortunately, we shamelessly lag behind the West in the sphere of the development of such fuel cells and air-independent power plants.

(Description of Source: Moscow Voenno-Promyshlennyy Kuryer Online in Russian -- Website of the weekly newspaper focusing on military and defense industrial complex issues published by Almaz Media, a subsidiary of the defense industrial firm Almaz-Antey -- URL: <http://vpk-news.ru/>)

## AFG/AFGHANISTAN/SOUTH ASIA

Released on 2012-10-19 08:00 GMT

<b>Email-ID</b>	798843
<b>Date</b>	2010-06-15 12:30:05
<b>From</b>	dialogbot@smtp.stratfor.com
<b>To</b>	translations@stratfor.com

AFG/AFGHANISTAN/SOUTH ASIA

### US Geologists Discover Huge Mineral Deposits In Afghanistan - ITAR-TASS

Monday June 14, 2010 16:00:35 GMT  
intervention)

NEW YORK, June 14 (Itar-Tass) -- U.S. geologists and Defence Ministry specialists have discovered huge mineral deposits in Afghanistan, the

value of which is estimated at almost one trillion U.S. dollars, the New York Times said on Monday. The newspaper says this will be enough to "enough to fundamentally alter the Afghan economy and perhaps the Afghan war itself". "The previously unknown deposits - including huge veins of iron, copper, cobalt, gold and critical industrial metals like lithium - are so big and include so many minerals that are essential to modern industry that Afghanistan could eventually be transformed into one of the most important mining centres in the world," the newspaper said. It quoted an internal Pentagon memo as saying that "Afghanistan could become the 'Saudi Arabia of lithium,' a key raw material in the manufacture of batteries for laptops and BlackBerrys." The value of the newly discovered mineral deposits "dwarfs the size of Afghanistan's existing war-bedraggled economy, which is based largely on opium production and narcotics trafficking as well as aid from the United States and other industrialised countries", while Afghanistan's gross domestic product is only about 12 billion U.S. dollar, the New York Times writes. Specialists compare the initially estimated wealth of the newly discovered deposits with that of Bolivia, which has the biggest lithium deposits in the world. The other discovered minerals include niobium, which is used in the production of superconducting steel, as well as some other rare-Earth materials. "While it could take many years to develop a mining industry, the potential is so great that officials and executives in the industry believe it could attract heavy investment even before mines are profitable, providing the possibility of jobs that could distract from generations of war," the newspaper says. It quoted General David H. Petraeus, Commander of the United States Central Command, as saying that "there is stunning potential here. There are a lot of ifs, of course, but I think potentially it is hugely significant." "This will become the backbone of the Afghan economy," Jalil Jumriany, an adviser to the Afghan minister of mines, said. Americans started geological prospecting in Afghanistan in 2006, using the "old charts" made by Russian specialists. (Description of Source: Moscow ITAR-TASS in English -- Main government information agency)

### **Russian website says economic interests may prevail in metal-rich Afghanistan**

Text of report by Russian Gazeta.ru news website, often critical of the government, on 22 June

[Article by Omar Nessar, 22 Jun; place not given: "**Weighed down by underground treasures**"; accessed via Gazeta.ru]

After the news about the incredible mineral deposits in Afghanistan, the United States and NATO countries can reassure their citizens with the fact that the "Afghan mission" will allow them to "mix business with pleasure." They are keeping troops in this country not only to fight terrorism but also to protect their economic interests.



In literally an instant, unstable, war-and poverty-torn Afghanistan went from being a "bankrupt state" to a potential supplier of strategic mineral resources to the international market.

Actually, both the Afghans themselves and the world community still have to get used to this new dimension of Afghanistan.

We recall how Western media reported, citing official Pentagon documents, that American researchers had discovered in Afghanistan huge deposits of iron, copper, cobalt, gold, niobium, and lithium.

In the opinion of several observers, the huge mineral deposits located could transform Afghanistan into the "Saudi Arabia of lithium."

Even before, experts called Afghanistan a country rich in natural resources. American specialists began talking about this for the first time back in 2002. However, today's optimistic forecasts regarding Afghanistan's transformation into a powerful resources player on the world market for iron, lithium, and copper comes as a surprise for many.

The sensation broke after the dissemination of the results of a joint study by American geologists and the military.

Exploration for mineral reserves in Afghanistan was conducted using maps compiled by Soviet specialists, so that there is every reason to talk about a "Soviet trail" in the geological discoveries of 2010.

Back in the 1960s, Soviet geologists began a wide-scale study of Afghanistan that lasted until the mid-1980s. In other words, by 1979 Soviet leaders had a pretty clear idea of Afghanistan's raw materials potential.

After the collapse of the socialist project in Afghanistan, nothing came of the country's resource potential. People simply forgot about it in the eddy of civil war and Taleban dictatorship in the 1990s. The Soviet specialists' maps, which had been moved to safe territory to the north of Kabul, were discovered in 2006. Since then, they have had a second life. Relying on Soviet data from the 1960s and 1970s, American specialists began a multi-year study of Afghan deposits with the help of Defence Department forces and the Orion P-3 reconnaissance airplane. The results of this research created a world sensation.

American specialists estimated the total value of the mineral deposits forecast in Afghanistan at \$1 trillion. However, in the opinion of Wahuidullah Shahrani, Afghanistan's minister of mines and mining industry, the mineral reserves in the country are estimated at \$3 trillion.

Wahuidullah Shahrani called the American specialists' estimates

understated.

Despite the difference of trillions of dollars, the reports about Afghan mineral deposits have been actively discussed for several days by the world press and expert community. The nature of this discussion allows us to talk about how the scandalous joint report by American military and geologists was intended for the West's broad public, especially the United States, from the very beginning.

The reaction of Afghan and Western politicians to the geological sensation was mixed but positive overall. And this is understandable. The news that a country whose budget today depends almost entirely on foreign assistance could cease to be not only a "world sponger" but also become one of the main suppliers of strategic materials for the international market is truly a miracle.

The appearance in the international news message field about Afghanistan's geological potential is quite curious given the absence of visible successes by the United States and NATO in the war with the Taleban. Meanwhile, the security situation in Afghanistan is not improving. The expectations that Western and Afghan public opinion pinned on the peace jirga held in early June have not been vindicated.

Afghan Interior Minister Munir Mangal recently stated that only 11 of the country's 364 districts have not had terror threats. Moreover, the Afghan military and NATO representatives predict a rise in violence in the country's south and east.

Participants in the international "Afghan mission" are losing hope of success in their fight against the Taleban. Antiwar moods are mounting in Western countries. A few days ago Poland, one of the United States' reliable allies in the "Afghan project," stated its intention to withdraw troops from Afghanistan. And although some experts considered this statement a campaign move by candidates for the Polish presidency, it was taken quite seriously by its NATO allies. Before this, Canada, the Netherlands, and several other participants in the "Afghan mission" expressed their readiness to withdraw troops from Afghanistan.

Actually, how can we talk about Washington's allies in the North Atlantic alliance if in 2009 President Barack Obama promised his voters to start withdrawing American troops from Afghanistan in mid-2011? Right now the US president is under the pressure of criticism from American military who feel that Obama needs to renege on his promise.

Apart from the unpopularity of the Afghan war in the eyes of public opinion, one other problem for Western leaders is the huge cost of the "Afghan project" connected with waging war against the Taleban and rendering humanitarian assistance to official Kabul.

The world economic crisis made the Afghan war too expensive an enterprise even for the rich countries of the European Union.

In the near future, another international conference is supposed to be held in London, and the main topic will be rendering economic assistance to Afghanistan. Have no doubt, this discussion will be a serious test of Atlantic solidarity with respect to meeting obligations for the "Afghan tax."

Therefore, the news of many billions' worth of mineral deposits in the depths of Afghanistan could not have come at a better time. Its replication not only helps ease Western leaders' task of explaining to their citizens the logic of "Afghan investments" but also gives new meaning to the Western mission in Afghanistan. Now we can talk about how the "Afghan mission" allows us to "mix business with pleasure." The United States and NATO are keeping their troops in Afghanistan not only to fight terrorism but also to protect their economic interests.

The rise of a "geological dimension" to the Afghan problem may be met with interest by Russia and Afghanistan's neighbours - Iran, China, and the Central Asian countries - which are extremely concerned not only about the spread of terrorism but also by Afghan drug trafficking. By the way, recently people were speaking in Moscow, at the International Antinarcotics Forum, about measures for improving Afghanistan's economic situation as one of the ways to fight the drug threat. The new estimate of the Afghan raw materials potential creates favourable opportunities to implement large-scale economic projects in the country. It is obvious that the income from the mining, processing, and export of natural resources could easily compensate the Afghans for financial losses from the drug trade, thereby facilitating the "denarcoticization" of Afghanistan's economy.

Today, the country's new resource possibilities are advantageous for official Kabul as well. The escalation of instability going on in the context of prospects for a possible withdrawal of foreign troops is forcing the Afghan leadership to search for new methods of influencing the situation while retaining interest in their country among Western politicians. And the prospects for transforming Afghanistan into a "world lithium empire" are good reason for the United States and the European Union to hang in there indefinitely. To the satisfaction of President Hamid Karzai, who is being forced to look for support among neighbouring countries due to his gradual loss of hope for his Western allies, who in 10 years have not been able to change the situation in the security sphere or defeat the Taleban. Incidentally, this newly revealed geopolitical reorientation of the Afghan leader is already giving rise to perplexity in Washington and the capitals of other Western ! states.

Actually, so far Hamid Karzai has not shown a desire to actively play

his "lithium trump." Unlike his Minister Wahuidullah Shahrani, who called on foreign countries to invest funds to develop and produce minerals in Afghanistan, Hamid Karzai's reaction to the geological sensation was unexpectedly restrained. Actually, this is understandable. The news blast about Afghanistan's new raw materials prospects immediately made relevant the half-forgotten problem of fighting corruption in Kabul.

Some American experts and politicians have already expressed public doubt as to the Afghan president's ability to deal effectively with the lithium, iron ore, and copper treasures due to the wide-scale corruption in the Afghan government. But to the Afghan president, these kinds of doubts are completely beside the point today.

The author is the director of the Centre for the Study of Modern Afghanistan (TsISA).

Source: Gazeta.ru website, Moscow, in Russian 22 Jun 10

BBC Mon FS1 FsuPol SA1 SAsPol 250610 ak/osc

## **BBC Monitoring Alert - AFGHANISTAN**

Released on 2013-03-11 00:00 GMT

<b>Email-ID</b>	799254
<b>Date</b>	2010-06-15 16:39:07
<b>From</b>	marketing@mon.bbc.co.uk
<b>To</b>	translations@stratfor.com

BBC Monitoring Alert - AFGHANISTAN

### **Afghan ministry says US survey undervalued mineral resources**

Text of report by Afghan independent Tolo TV on 15 June

[Presenter] The Ministry of Mines says Afghan minerals are worth more than was announced by the Pentagon. The ministry asked the international community to help them with extraction and security at the mines. The Pentagon has announced that there are challenges in extracting and benefiting from the mines.

[Correspondent] **While a joint study by the Pentagon and the US geological Survey has estimated the value of minerals in Afghanistan**

**especially iron, gold, copper, lithium and beryllium, at one trillion dollars, the Afghan Ministry of Mines says Afghan mines are worth several times more than the figures published in the report.** The ministry says they will give more details about the report later this week.

[Jawad Omer, Ministry of Mines spokesman, captioned] We need security, modern equipment, proper advice and training for Afghan specialists.

[Correspondent] The Afghan Ministry of Finance says investment on study and extraction of Afghanistan's mines will be the Afghan government's main demands at the Kabul International Conference.

[Aziz Shams, Ministry of Finance spokesman, captioned] Some 35 per cent of Afghanistan's ordinary budget is covered by foreign donations. If we can extract these mines, we will have vast domestic income. It is estimated that we will be able to cover our ordinary budget for several years.

[Correspondent] Some geologists say investment on study and extraction of mines in Afghanistan is important for improving the financial situation and stability in Afghanistan.

[Sayed Bahador Akabar, Afghan geology university teacher, captioned] Unemployment is the main reason behind growing insurgency in Afghanistan. One of the ways we can create jobs is to extract our mines.

[Correspondent] The Afghan government says the exploration of Afghanistan's minerals has been carried out by US geological Survey in conjunction with the Afghan government. According to the report by Pentagon, a long time is required to extract Afghanistan's mines and that most of the mines are located in areas under Taleban control. Afghan government officials say Afghanistan's mineral resources are so vast that they will soon attract international investors' attention. The report says the mineral deposits are scattered throughout Afghanistan. According to the study, most of the minerals are located in the southern, eastern areas of Afghanistan and along the border with Pakistan but there are still question about the manner of extracting these mines and investing in mining industry. Continuing insecurity in Afghanistan, lack of good governance, lack of capacity and illegal extraction of minerals are considered obstacles to extraction at

Afghanistan's mines.<\/! p>

[Video shows Afghan ministerial spokesmen and university teacher speaking; archive footage of minerals and vehicles.]

Source: Tolo TV, Kabul, in Dari 1330 gmt 15 Jun 10

BBC Mon SA1 SAsPol ceb/sj

## Afghanistan: The Significance of Mineral Wealth

Released on 2013-03-12 00:00 GMT

<b>Email-ID</b>	1324144
<b>Date</b>	2010-06-15 00:16:22
<b>From</b>	noreply@stratfor.com
<b>To</b>	allstratfor@stratfor.com

Afghanistan: The Significance of Mineral Wealth

### Afghanistan: The Significance of Mineral Wealth

June 14, 2010 | 2110 GMT

Afghanistan: The Significance of Mineral Wealth

U.S. Geological Survey

Workers taking part in a 2006 U.S. Geological Survey mission in Afghanistan

Summary

In a June 13 story, The New York Times revived interest in Afghanistan's potential mineral wealth, which has long been suspected. The country's mountainous terrain indicates the likelihood of such deposits, and in 2007 the U.S. Geological Survey published a study reporting much of what is being said in the media today. But the challenges of extracting the minerals and bringing them to market in an economical and competitive way remain extraordinarily daunting.

Analysis

The potential for mineral extraction in Afghanistan has generated immense press in the last few days, following a June 13 New York Times story on an estimated \$1 trillion in mineral deposits believed to exist

in the country and a June 12 statement by U.S. Central Command chief Gen. David Petraeus characterizing Afghanistan (with caveats, of course) as having "stunning potential" economically.

Yet much of what is being discussed dates back to two studies done in 2006-07 by the U.S. Geological Survey in conjunction with the U.S. Agency for International Development and Afghan geologists. The results of these studies were published in 2007 by the U.S. government, and their findings have now reportedly been verified by a small, Pentagon-led team, which will release its report at a conference in Kabul scheduled for July 20, according to a spokesperson for the French Foreign Ministry. There also is increasing talk of lithium deposits in particular, one of the reasons behind the current coverage. Statements regarding Afghanistan's potential mineral wealth have been made in the recent past, with Afghan President Hamid Karzai using the \$1 trillion figure at least as early as February of this year and Petraeus using it when discussing the matter in December 2009.

#### Afghanistan: The Significance of Mineral Wealth

U.S. Geological Survey

A map from the 2006 U.S. Geological Survey mission in Afghanistan, including GPS and magnetic base station locations  
([click here to enlarge image](#))

The China Metallurgical Group has already committed \$3 billion up front and \$400 million thereafter to secure the rights to the Aynak copper mining district in Logar province. Verification drillings were done last year, and a temporary camp is now being prepared, though a massive railway, power plant and smelting facility remain to be built. The Hajigak iron-ore deposit also was examined in an area about 100 kilometers west of Kabul, in Bamyan province, but the Chinese pulled out of the bidding, which was later canceled following a corruption scandal involving the Chinese company and the Afghan Ministry of Mines during the Aynak bidding process. The Chinese experience shows that what little progress is being made in terms of foreign investment in Afghan mining projects is already slowed by problems relating to poor infrastructure, awkward logistics, security threats, and corrupt or opaque negotiations.

The potential presence of large mineral deposits in Afghanistan has never been in doubt - the country's mountainous terrain indicates the likelihood of such deposits. The challenge is extracting the minerals

and bringing them to market in an economical and competitive way, and this challenge remains extraordinarily daunting. Afghanistan is an underdeveloped country with extremely poor infrastructure, including no rail connection to the outside world (though one is under construction to Masar-i-Sharif in the north). Though the nature of a mineral deposit and the economics of its exploitation can vary considerably - even within a single country - pulling ore out of the ground and moving it a great distance is a logistically intensive proposition, even with relatively developed road and rail networks.

Technically, developing sufficient infrastructure in Afghanistan is possible, but the cost of doing so is almost certain to drive the costs of mineral investment, extraction and transportation far above what can be recouped on the global market.

STRATFOR has been focusing and continues to focus on how these reports came about just in the past week. There is clearly a media blitz now under way, and it is important to understand why. Over the next few years there will be little meaningful impact on the ground in Afghanistan in terms of investing in and developing the country's minerals. The key question at this point is how Washington will play this mineral-wealth story to serve its interests in the region, especially as the United States struggles to break a stalemate in southwestern Afghanistan and force the Taliban to the negotiating table. But local mistrust of U.S. intentions may counter any potential benefit of playing up Afghanistan's economic potential.

From: Stratfor <noreply@stratfor.com>

To: robert.reinfrank@stratfor.com <robert.reinfrank@stratfor.com>

Stratfor logo

### **Global Economy: The Geopolitics of Car Batteries**

August 17, 2009 | 1157 GMT

A cutting model of a Toyota Prius hybrid vehicle's battery module on June 5

TOSHIFUMI KITAMURA/AFP/Getty Images

A cutting model of a Toyota Prius hybrid vehicle's battery module on June 5

#### **Summary**

As hybrid vehicles become more popular, vehicle manufacturers will seek more sources of lithium to produce car batteries. Lithium is the most efficient raw material for battery production, but there are only a few lithium deposits in the world - mostly in South America. As demand for the mineral grows, those countries with large lithium deposits, such as Chile, will play a larger role in the global economy.



## Analysis

As global concerns about energy security and carbon emissions skyrocket, hybrid vehicles, which combine electric and gasoline power sources, are capturing greater market share and global attention. Incorporating a source of electricity into a car requires a battery - something for which several different raw materials can be used. Lithium is the most efficient raw material used in batteries, but the number of lithium deposits in the world is limited; most are found in South America. As the market for lithium grows, countries with large lithium deposits will become more important to the global economy. Countries with the technology to process lithium and manufacture batteries will also become more significant.

### chart - lithium reserves

The current standard material for high-powered rechargeable batteries for hybrid vehicles is nickel metal hydride (NiMH). Australia has the world's largest proven reserves of nickel, but Russia, Canada and Indonesia are the largest producers.

With such wide distribution of

easily accessed nickel deposits, an interruption in the supply or manufacturing of NiMH for batteries is relatively unlikely. NiMH batteries are quite expensive, but presently they are more cost-effective than the lithium-ion batteries being developed to replace them. For now, NiMH batteries will remain the standard (even the new 2010 Toyota Prius relies on NiMH batteries).

However, lithium-ion batteries will become the standard in the near future. Underpinning this shift is the simple fact that NiMH batteries are heavy and their energy per unit of mass is approximately half that of a lithium-ion battery. Though lithium batteries are effective, the industry has yet to develop a way to mass-produce them at the scale the automobile industry requires. As soon as the manufacturing technology becomes available, every car company in the world will be able to use lithium batteries. Carmakers are ready to shift to the lighter lithium batteries because they would boost vehicle performance.

### The Making of a Lithium Battery

Lithium can be obtained in small quantities in the form of lithium chloride (LiCl) from just about anywhere in the world, but concentrated deposits - called salares - are found only in a few places. Salares result when pools of salt water, which contain LiCl, accumulate in basins that lack drainage outlets, allowing the water to gradually evaporate and leave dense layers of salt behind. Underneath the dried salt layer is a layer of brine - groundwater with a high concentration of LiCl in solution. It is this brine that is highly prized as a source of lithium.

For a lithium deposit to be commercially viable, it must have a large amount of lithium that is not contaminated with too much magnesium, and it must be in a location where natural evaporation will concentrate the watery solution where LiCl is normally found. Factors that contribute to increased evaporation include low air pressure found at high altitudes, low precipitation, frequent winds, high temperatures and exposure to solar radiation. Thus, commercial lithium deposits are found along

volcanic belts in the earth's desert regions.

The process of harvesting LiCl exploits the same natural process that initially created the salt flat - evaporation. Brine is pumped from beneath the crust into shallow pools on the surface of the salt flat, where it is left to bake in the sun for about a year. During this period, the LiCl becomes more concentrated as the brine is reduced by solar radiation, heat and wind.

To be used in a lithium battery, however, the LiCl must first react with soda ash to precipitate lithium carbonate ( $\text{Li}_2\text{CO}_3$ ), which can then be processed into metallic lithium for use in making a battery's cathode. This usually takes place at off-site chemical processing plants, making

it necessary to transport the lithium by tanker - something that becomes economically viable only after the lithium solution is sufficiently concentrated. Thus, the rate at which the water evaporates is quite important for economical harvesting of lithium, and it also influences the size (and therefore the environmental footprint) of the solar ponds required to achieve economic concentrations.

After the lithium is extracted, it must be processed for use in batteries, and only a few producers have the required capital and capacity to manufacture lithium batteries. Currently, most companies that can supply lithium-ion batteries for vehicles are joint ventures between auto manufacturers and technology firms. Of these, seven are based in Japan, two are in the United States, two are in Korea and one is in China. These few producers rely on even fewer suppliers for the components - primarily the anodes, cathodes, separator and electrolytic salt - of lithium-ion batteries. The most specialized step in the process is the production of the electrolytic salt used in lithium-ion batteries. That salt (lithium hexafluorophosphate) is produced only in Japan at two complexes, one in Okayama prefecture and the other in Osaka prefecture.

#### Lithium's Geopolitical Power

An estimated 70 percent of the world's LiCl deposits are found in South America. Chile is the world's largest producer of LiCl - not only because Chile already has highly developed mining, transport and processing infrastructure, but because its climate and geography are favorable for the evaporation that is central to producing lithium.

The Salar de Atacama is located in the Atacama Desert, which receives almost no rainfall and has high winds, low humidity and relatively high average temperatures. Together, these features make the Salar de Atacama the second-driest place on earth, after Antarctica.

Argentina has the world's third-largest estimated lithium reserves.

Argentina's Salar de Hombre Muerto's average elevation is nearly twice that of Salar de Atacama, but what it gains in altitude it sacrifices in net evaporation. Though its evaporation rate is only about 72 percent of Atacama's, Salar de Hombre Muerto is still commercially successful because costs are low and are further offset by the sale of recoverable byproducts like boric acid.

chart - lithium production

Bolivia produces no lithium, though it is sometimes called "the Saudi

Arabia of lithium" because its still-untapped salares are thought to contain nearly 50 percent of the world's estimated lithium reserves, most of which is found within the brines of the vaunted Salar de Uyuni. Attention to Bolivia's reserves has increased strongly in recent years, with South Korea, Japan and France showing particularly strong interest (China is rumored to be interested as well). However, having a resource does not mean it can be brought to market at a reasonable cost. Uyuni's higher rainfall and cooler climate means that its evaporation rate is not even half that of Atacama's. Achieving the necessary concentrations is further complicated because the lithium in the Uyuni brine is not very concentrated, and the deposits are spread across a vast area. Uyuni also has a high ratio of magnesium to lithium within the brine, which means the magnesium must be removed through an expensive chemical process. This is something Chile has handled with relative ease, but Uyuni's deposits have three times the magnesium concentrations of Atacama's, making investment in Bolivia's deposits much less economical.

chart - major lithium deposits

Bolivia also lacks established infrastructure, and any serious investments in Uyuni would require extensive spending upfront on infrastructure development. Combined with the highly unwelcoming investment climate in Bolivia, there is no guarantee that the country will be able to attract the massive investment necessary to develop its reserves, despite the rise of global interest in lithium. It will be difficult for the Bolivian government to achieve its goal of becoming a center of lithium processing. This is not to say that Bolivia could never be a major lithium producer, but in the short- to medium-term, Chile will continue to dominate global lithium markets.

Growing Market Share, Growing Importance

Because of the high level of specialization currently required in the lithium battery market and the limited number of sources for the materials, the growth and stability of the market depends heavily on a few manufacturers. In part, this is a result of the high levels of capital investment needed to develop and supply the batteries at scale. However, as car manufacturers begin to ramp up production of hybrid vehicles, the demand for lithium batteries will increase. Higher production will likely help reduce the cost of each individual battery, and opportunities for prospective manufacturers will increase. The shift toward lithium-ion batteries will not be immediate, but lithium batteries will become more affordable as car manufacturers seek to increase vehicle performance while reducing gasoline consumption. This means that Japan's technology centers and Chile's lithium mines will become increasingly important to the global economy

END OF VOLUME ONE

VOLUME TWO BEGINS WITH SUMMATION OVERVIEWS  
CDF-HHJJ- Non Classified as of this date